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Witch-Hunt, Go Home!

Pressure has been steadily building up in Canada, largely from various well-intentioned consumer groups and politicians, for public investigations into the so-called high prices of drugs in this country. In this regard, Canada is merely following along a path already well-worn south of the border by Senator Estes Kefauver and his Antitrust and Monopoly Subcommittee.

Kefauver and his committee made political hay at the expense of the drug companies for a year or two until he had milked the subject for all the headlines it could command, then dropped it for such other more newsworthy items as chasing the already-penalized electrical price fixers.

If indeed these drug hearings are to be duplicated in Canada, as it now appears, then let us devoutly hope that our probers, politicians and news media act in a considerably more responsible manner than their United States counterparts.

The pricing of any product, as anyone who has ever been close to the process knows, is a very complex affair. It is much more an art than a science. It is not readily grasped and understood by economists and businessmen, whose business it is, let alone by the man or woman on the street. It is all too easy for the uninformed to talk about markups as if they were profits, to ignore the 10 products that fail for every one that succeeds, to compare prices of low-priced imports in bulk with retail prices of small packages of branded products, to overlook patent piracy and chiselling on quality control procedures that often mark the many parasitical firms on the fringe of this industry.

It is altogether too easy for such people as CCF leader Hazen Argue to indulge in such demagogueries as "Drug prices in Canada are extortionate' 'and "Drug prices in Canada constitute a national scandal that must be removed." Such completely unfounded and irresponsible charges, addressed to an uneducated and emotional audience, constitute passing sentence before any evidence has been heard.

We have no way of knowing whether those in charge of the drug industry in Canada have acted ethically, intelligently and responsibly, or not. Nor, we suggest, does Mr. Argue know. It is customary to examine the facts before making up one's mind.

If indeed our legislators have nothing more important to do with their time, then by all means let us have a probe of drug prices. But let us have it in an atmosphere of seeking for truth and equity, not in prejudgement and wild accusation. Let us renounce the blatant publicity-seeking approach of the Kefauver group, at least until the facts are known. Let us realize that the drug manufacturers are in business to make a profit, like any other businessman, and that as long as they conduct themselves honestly and responsibly there is nothing wrong with their making a profit. While we look for possible abuses, let us also look for the benefits which competition and individual initiative have bestowed in terms of new products, research, better distribution and productive efficiency.

Above all, let us realize that the key issue here is one of freedom. Drug manufacturing has never been considered a public utility in this country; on the contrary, it has been left for private capital and private initiative to develop. And as long as this is to be the case, we suggest that it is up to the market place, not our legislators, to determine whether drug or any other prices are "too high."

—David S. R. Leighton

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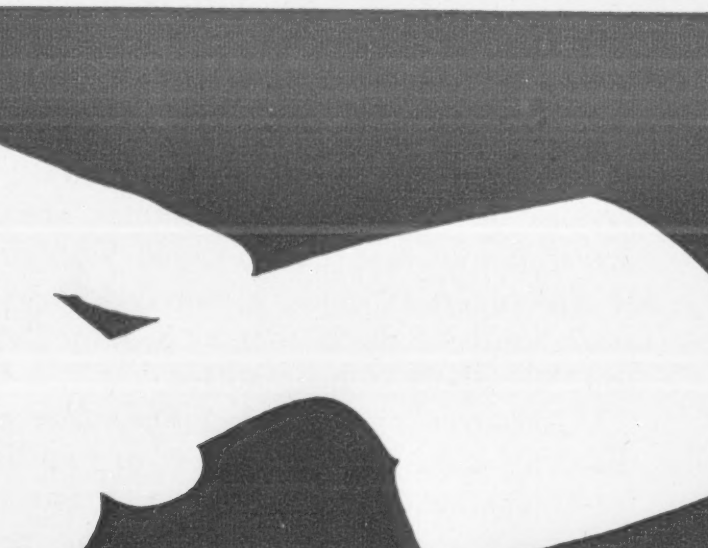

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Continued on next page

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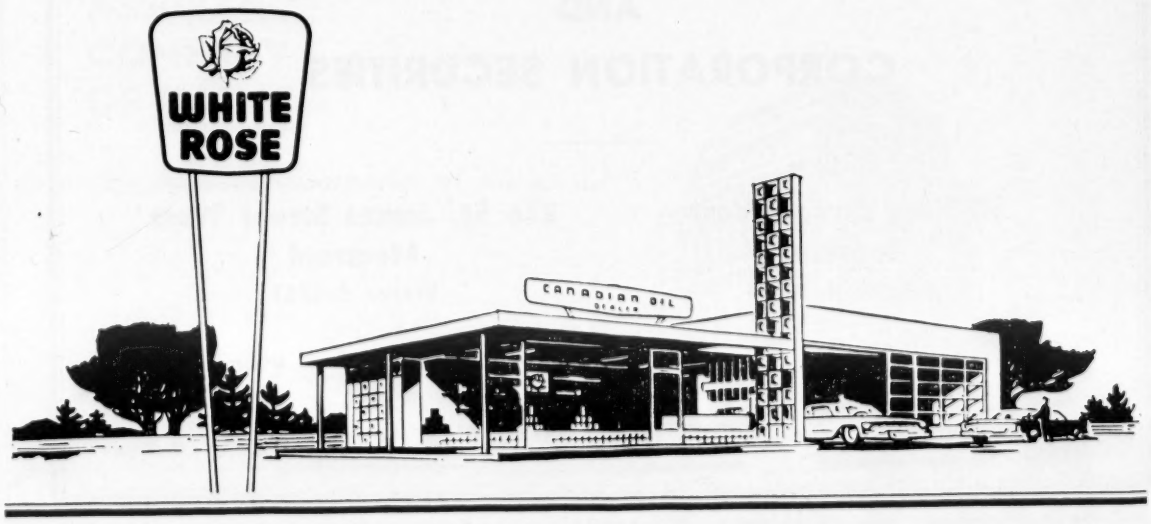

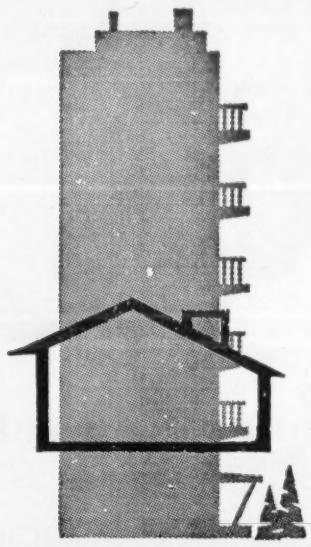

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1961

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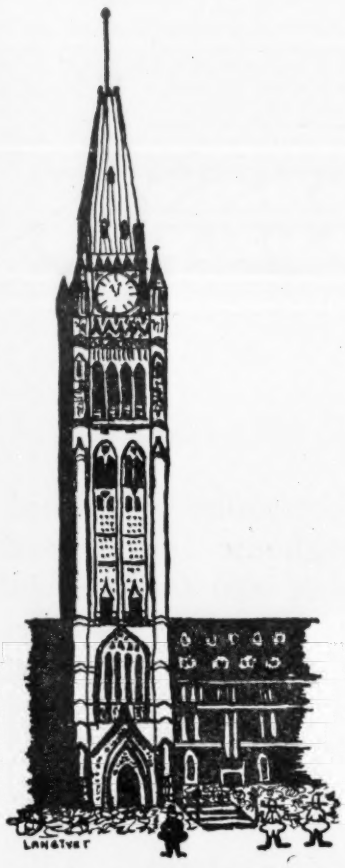

Ottawa Newsletter

PATRICK NICHOLSON

The efficiency-concious businessman normally tends to feel impatient in his dealings with Government. "Too much red tape," he complains, superciliously.

How does the businessman turned Cabinet Minister feel about his work as an executive director of the biggest business in Canada?

A former chartered accountant and a former lawyer both see Red Tape as the proud badge of democratic government.

"When I was in business," said Hon. J. Waldo Monteith, as we sat in his Parliamentary office, "if I wanted to get from this desk to that far corner of the room, I just walked towards it in a straight line."

"But when I had been on Parliament Hill a few months," added this former Mayor of Stratford, who is now our Minister of National Health and Welfare, "I found that there are so many angles in politics that one achieves one's objective more surely by going out the door, walking along the corridor, coming in another door and then approaching that corner."

"Of course at first I thought this all wasteful inefficiency. But soon I saw that, as a part of our democratic process, these moves are all necessary."

Another Minister confirmed this prevalence of angles in political life.

"The life of a business executive and of a cabinet minister are as different as night and day," says Hon. David Walker, formerly one of Canada's most eminent corporation lawyers. "A business executive enjoys an authority which cannot be questioned; when he makes a decision, he gives orders which are automatically carried out. He does not stop to consider whether or not these orders give pleasure to all concerned."

But a cabinet minister, before coming to any decision, must consider its effects on the whole of Canada," adds Mr. Walker, now our Minister of Public Works, "for its repercussions will generously be felt by all sorts of people with widely varying problems. Therefore the Government must give all concerned parties the opportunity of presenting their viewpoint before coming to a decision. And, in that decision, it must carry even the dissenters along in the conviction that the course adopted benefits the nation as a whole."

The difference, it seems, is simply that between the silence of the cash register and the sanction of the ballot box. A businessman may offend the majority of Canadians, but yet achieve adequate profits from his custom among the remaining few; in contrast, a politician owes his temporary appointment to the will of the majority, and further is subject to the daily approval of the shareholders' representatives, namely Parliament.

The executive directors of Canada Unlimited, who are our Cabinet Ministers, are grossly overworked and underpaid by normal business standards. And the exigencies of the democratic system throw obstacles in their path so crippling that, as a former Prime Minister of Britain once told me, five years is par for the course there in any major portfolio, for the average politician in later life.

Hon. David Walker handles an annual budget of $225 million in his Department; Hon. "Monty" Monteith is "managing director" of a "corporation" with a budget six times that size. In private business. a salary of $75,000 a year would not be high for either post. Yet each of these Cabinet Ministers is paid just $15,000 by the Canadian taxpayers. He also receives a tax-free allowance of $2,000 in lieu of car and driver. But the business executive normally enjoys the free use of an executive-type car with driver, which in depreciation, wages, and running costs would total at least $8,000 a year.

In addition, the business executive has the executive benefits from a generous—or at least a reimbursing—expense account. But the Minister must pay his own club dues; cannot charge up the cost of entertaining his "clients"; and must meet his own transportation and hotel costs on many of the trips which evolve from his job.

Mr. Walker, a fitness-fan, misses his skiing and horse-riding on Parliament Hill. But in late summer

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Washington Newsletter

J. M. MINIFIE

Soon after his inauguration, President Kennedy spoke at a luncheon of the National Industrial Conference, a gathering of the great captains of American industry. The banquet hall glittered with illustrious names, it was stiff with presidents, chairmen of the board, managing directors, and executive vice-presidents.

Addressing this distinguished gathering, Mr. Kennedy expressed his gratification at seeing so many fine representatives of American business—much finer and more representative, he felt sure, than their colleagues who were languishing in Montgomery County Jail for their part in rigging prices of electrical machinery.

After the ensuing nervous laughter, captain could be seen eyeing captain as if to estimate by what slender margin he had escaped incarceration. For there is little doubt that conspiracies to fix prices and rig bids are so widespread as to make something of a mockery of the vaunted virtues of free enterprise and competition in the market place.

The wicked, cheap-labor, cartel-minded, unfairly-competing foreigners played a conspicuous part in the downfall of these fine, upstanding, American free enterprisers. Their designs were furthered by agencies such as the Tennessee Valley Authority and the Bonneville Power Administration, practitioners of what President Eisenhower once referred to as "creeping socialism."

These agencies, perhaps the greatest producers of public power outside Soviet Russia, had observed with increasing dissatisfaction that while foreign bids on equipment ranged over a wide spectrum, the three or four American bidders were concentrated in a suspiciously narow band some 50% above the lowest foreign bid. They turned samples over to the Department of Justice, and Mr. Eisenhower's Attorney General, William P. Rogers, prosecuted. Twenty-nine high officers of great equipment manufacturers were found guilty of criminal violations of the Sherman Anti-Trust Act; they and their companies were fined, while seven officers of Westinghouse and General Electric were jailed for a month into the bargain. The fines had been anticipated. The jail sentences had not. Neither had the liability of the companies to damage suits by clients based on the plea of guilty or not guilty which the court had insisted on rather than a *nolo contendere.*

The suits and the sentences aroused public indignation, which had already been stirred by evidence of fantastic over-charging in the drug industry. Senator Estes Kefauver, who had conducted that investigation, took up where the courts had laid off and, after an initial hassle with Republican members of his sub-committee, insured that hearings would be in public session.

A Westinghouse sales manager told in some detail how the privilege of being low bidder on a contract ranging from $450,000 to $4,500,000 frequently went to the company official who first arranged for the meeting. He recalled one occasion when the low bidder on an unattractive contract was decided by drawing lots, and General Electric lost. But this, he said, was unusual.

These hearings foster an increasing suspicion that industry has taken more than its share out of the kitty in the change-over from assembly-line to automation, and that the public has been clipped three ways; first, by higher prices made possible by conspiracies, some proven, more suspected; secondly, by unemployment, which is seen as deriving from automation; and thirdly, by loss of business both at home and abroad to foreign competitors. Depression fosters such suspicions, and there are no signs that the country is pulling out of it yet, at least so far as unemployment is concerned. If Senator Kefauver uncovers significant evidence of unethical practices in Big Business, the mood of the people in the elections of 1962 may be reflected in a much more radical Congress than the current conservative body.

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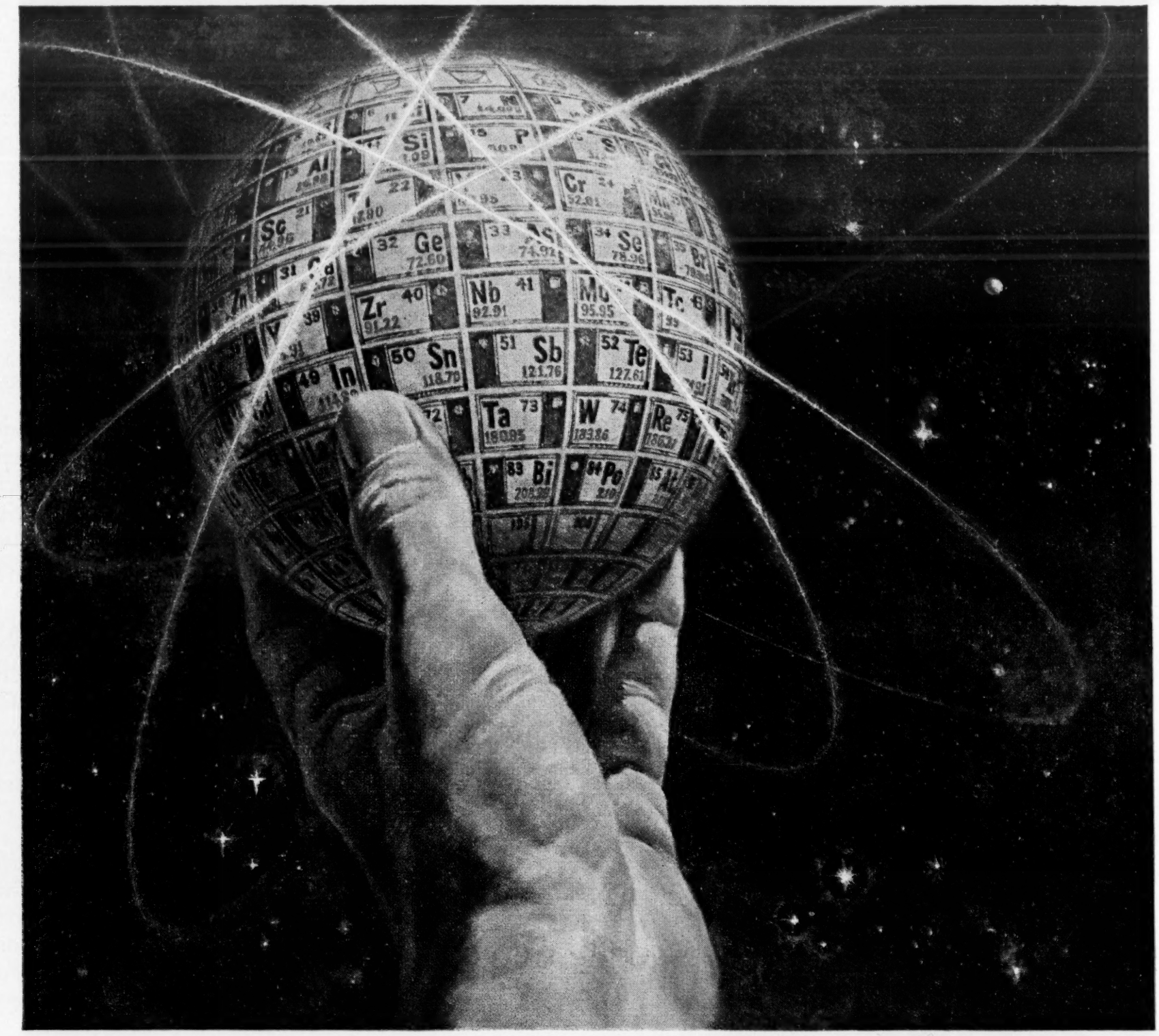

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Railways, Railway Wages and the Nation

The reader will note that Dr. Peitchinis' suggestions, submitted to the Prime Minister on February 24, are basically in accord with those in the recently released report of the Royal Commission on Transportation. The question, according to Dr. Peitchinis, is not one of subsidy or no subsidy but rather the determination of the kind of subsidy that will not invite exorbitant demands from labour.

STEPHEN G. PEITCHINIS

THE RAILWAY INDUSTRY AND ITS RELATION TO THE NATIONAL ECONOMY

It is generally recognized that the railways are essential to the life and economy of every nation. The time has not yet come when their services can be replaced effectively by other means of transport. Considering this indispensability of railway services, it is a contradiction in principles to state that the industry is not able to pay its way, especially in periods of intensive economic activity. If an essential service is not able to pay its way, then the general cost structure of industry is artifically maintained and the costs of production and distribution are not borne to their full extent by all enterprises in the economy. This is not the consequence of having a partially nationalized railway industry; it is rather the consequence of a public recognition that the railways are common carriers and of their use by Governments as instruments of economic policy. As such, ever since their inception, the railways have been compelled to perform commercial and public services at prices that are beyond their control, while their costs are determined by market forces. If we accept the proposition that the railways provide an indispensable transport service, but also recognize that the community demands that some services be rendered at charges unrelated to the cost of conveyance, then what weight, if any, should be given to the railways' ability to pay?

WAGES, RAILWAY CHARGES, AND THE ABILITY TO PAY

The railway wages problem assumed prominence in the immediate post World War I period and has remained as a *problem* to this day. A number of factors are responsible for this, amongst which the more important are: the extremely restrictive regulation of railway charges, which contributed to the existence of unduly low wages for some railwaymen before 1918; the sudden and substantial increases obtained under the "McAdoo" and "Chicago" Awards in 1918 and 1920 respectively, which the railways could not fully absorb even though greater charges were permitted; the fact that these wage increases coincided with the emergence of road transport, which not only diverted lucrative traffics from the railways but also prevented the railways from applying the compensatory increases in charges to all traffics or to their full extent; the continuation of restrictive regulations on railways charges and operations even after it became amply evident that the railways no longer had a monopoly of inland transport; the rise in prices, accompanied by increasing industrial productivity, which facilitated a general rise in the level of industrial wages, which the railways, because of their controlled charges, could not match; and finally, the use of the railways as instruments of economic policy without compensatory payments.

Inability to pay has always been the main argument brought by the railways against meeting their employees' demands for wage increases. But while rejecting such demands on many occasions, management conceded that some wage increases were deserved and indeed for certain grades even necessary if recruitment was not to suffer. This line of argument, which has been in evidence since the early 1900's suggests that the outright rejection of just and often

anticipated demands is designed to strengthen the railways' case for increases in charges. Hence the railway problem, which has featured prominently in recent years, has in fact existed ever since the commencement of their operations. For the problem really is how to offset rising operating costs with charges that must remain *fair and reasonable*—within the reach of the travelling public and shippers—and to perform certain socially and nationally necessary services that have little or no commercial merits.

From an economic standpoint, in a prosperous economy such as the Canadian, railway rates and fares should be so adjusted as to enable the railways to cover all their costs, including the necessary return to capital. Such a rate structure could be regarded as fair and reasonable to both the travelling public and shippers and to the railways. If such *fair and reasonable* level of charges were found to be too high in the light of social considerations and in terms of the Government's economic policy, then the difference between the necessary and the permissible levels should be made up from the national treasury. When social and economic considerations require the maintenance of unremunerative lines and the charging of rates that do not cover the cost of conveyance, then the taxpayer rather than the users of other lines should bear the burden.

The question of compensation for social services and services rendered at less than commercial rates requires urgent Government attention: the fact is that any socially imposed restrictions on the freedom of the railways to operate in the same way as any other commercial enterprise would remain, because they rest on the principle that the railways are common carriers and hence have a customary obligation to provide an efficient low-cost service. The eradication of custom requires dictatorial measures—ruthless business practices, and, in a democracy, politically suicidal legislation. To permit the railways to undertake ruthless cutting of services, charge what the traffic will bear, and discriminate between customers, would not be tolerated by the public. For obvious reasons, legislation for curtailment of services and freedom in charges and operations will not take place. These issues have not been properly defined for more than half a century. Hence every time a wage increase is conceded, the railway problem is revived, the public is reminded that it is still with us, and it is then shelved until the next wage demand when it re-emerges to occupy the press and the House of Commons. Canada has had a Board of Transport Commissioners for over fifty years now, which posesses a record of impartially and competence unequaled in any other country. Surely this Board is the only appropriate body to advise the Government on measures necessary to relieve the railways from, or compensate them for, services performed in the national interest.

The railways could augment their profits if they were permitted to operate as any other commercial enterprise: they could strike a balance between supply and demand at a higher profit level, but this would involve reducing substantially the extent of the services performed and increasing charges wherever and whenever possible. However, such actions are not regarded as in the national interest. But if the railways are compelled to maintain unremunerative services and their charges are kept down in order to achieve economic effects different from those that would result in a free market, should the wages of the men responsible for the maintenance of efficient services be limited by the ability to pay? If the Canadian public endorses the Government's transportation policy, which, even though not clearly outlined, appears to be based on the principle of using the railways as instruments for the implementation of economic policies, whether expressed in terms of fostering specific industries or enforcing the effectiveness of price policies, then they must accept responsibility for the maintenance of railwaymen's wages at a level equal to that maintained by profitable industries.

The railways' argument of inability to pay wages comparable to those of other industrial workers has been interpreted by most conciliation boards to mean 'inability to meet the demands under the existing level of charges.' Since the latter are subject to Government control, Boards recommending wage increases in effect transferred the decision as to the allocation of the rise in labour costs to the Government: the prevailing opinion being that wage increases were necessary, the railways could not afford them under the existing level of charges, hence it was up to the Government to decide whether to permit increases in rates and fares or cover the rise in operating costs with subsidies. The regulation of railway charges is not the only obstacle to the return of railway prosperity. The argument of 'inability to pay under the existing level of charges' does not have the weight that it had before the emergence of road transport competition. The increasing efficiency of highway transportation, the continually expanding network of highways, efficiency in air and water transportation have forced the railways to become reluctant to offset wage increases by higher charges. Hence the inability to pay argument has assumed more and more the meaning of 'inability to pay under the existing organization of, and the social and statutory obligations imposed upon the industry,' rather than under the existing level of charges.

As long as the general trend of wages is upward, the railways cannot expect the pressure from their employees for higher wages to cease. The deployment of the railways as instruments for the implementation of economic policies has reduced the importance of the ability to pay factor as a wage determinant. This is evidenced by the declaration of Mr. Justice J. O. Wilson in 1950 to the effect that the financial position of the railways should not be used as a basis to perpetuate unjust substandard wages; if railwaymen deserve increases, then such must be granted and the public must bear the cost. In 1956, Mr. E. G. Taylor (Chairman of Conciliation Board) suggested that the Canadian National was a more appropriate yardstick for wage determination than the Canadian Pacific, because it was owned by the people of Canada and hence its employees had the right to demand "that their standard be kept at a level with the nearest comparable standard in Canadian industry." These statements are substantially the same as that expressed by Lord Cameron (Chairman of a Court of Inquiry on a dispute between British Railways and their employees) in 1955 in the declaration: "the Nation has provided by statute that there shall be a nationalized system of railway transport, which must therefore be regarded as a public utility of the first importance. Having willed the end, the Nation must will the means." What all these statements mean is that the railways are performing a public service, and, therefore, railwaymen are entitled to a *fair and adequate* wage regardless of the industry's ability to pay. As to what is *fair and adequate* or whether railwaymen *deserve* wage increases could only be determined by the rates paid to workers in comparable employments in other industries.

COMPARATIVE WAGES

Comparative wage trends bear the greatest weight in wage determination, especially so when third parties are called upon to resolve labour-management disputes on wages. It is not easy, however, to use this criterion: Which industries, industrial groups and occupations should be adopted as the standard of comparison? What base should be adopted to measure comparative wage trends? Should comparisons be made in terms of weekly wages, earnings, hourly rates, or hourly earnings? All these questions are a source of unending and bitter controversy between unions and management.

The selection of industries and industrial occupations for comparison has usually proven the most difficult task. In addition to comparisons of jobs, consideration must be given to such factors as, regularity and irregularity of employment; length of time required to master a certain skill; responsibility; conditions of employment; non-wage provisions in the respective contracts such as pensions, insurance and medical; and other advantages and disadvantages of the occupations and industries that are compared. The relative positions of the industries themselves must also be considered. A high level of activity in industry A does not necessarily coincide with one in industry B. Account must be taken of the possibility that the equilibrium relations have shifted: thus the wages in export industry A may have been depressed relative to those of industry B, which supplies only the domestic market, because industry A was adversely affected by a decline in world commerce. So in periods of abnormal (distorted) industrial conditions, the workers in some industries may attain a level of remuneration out of relationship to that of workers of similar capacity and skill generally. Consequently it would be easy to be mislead by basing a comparison upon a specific trade or even a group of trades. When comparisons are made between industries, therefore, a general view should be taken; consideration must be given to the economic situation; and the average wage of a number of years should be used rather than the one prevailing at the point of time.

Another factor should be borne in mind: over time the job content of the various skills changes. Therefore, even when comparable skills are found, it would be an error to continue the comparison for very long without a re-examination of the properties of comparative jobs. There are two ways in which comparisons are made:

(a) the percentage increases obtained since the last wage increase, and

(b) the actual rates paid to comparable grades and occupations.

The first avoids the necessity of finding jobs so similar as to make comparisons of absolute rates of pay. But each has its own difficulties: there may be wide variations in the actual rates of pay at the base year; and significant changes may occur in the content of the various jobs. The second encounters the difficulty of finding sufficiently comparable jobs. This is not, however, an insurmountable difficulty. The problem was resolved satisfactorily in Great Britain by the Guillebaud Committee. The British Transport Commission and the railway unions could not agree on what industrial occupations were truly comparable with the various occupations and grades of railwaymen. They agreed, however, to appoint an independent committee to compare railway pay with payments made for comparable work in other industries. The committee, under the chairmanship of Mr. C. Guille-

baud, conducted a most detailed investigation and found a sufficiently large number of jobs in other industries to make equitable comparisons in rates of pay. The committee's report was accepted by the parties as well as by the Government. Since the issue of comparative wages has been one of the major points of disagreement between Canadian railways and their employees, is it not time to follow the British example? The compilation of truly comparable occupations would serve as an index to the movement of actual rates of pay, and furthermore would provide the Government and the Canadian public, who in future would definitely assume more and more the burden of wage increases, with unquestionable proof as to whether wage increases were warranted.

RAILWAY CHARGES AND RAILWAY WAGES

A serious impediment to the conclusion of wage agreements through negotiation between the railways and their employees—without resort to conciliation and direct Government intervention—has been the regulation of railway charges. The reference to conciliation of every union demand for wages advances can be attributed solely to the railways' apprehension, not entirely unfounded, that voluntary wage increases would prejudice their case for increases in rates. In fact, conciliation of every wage demand may be said to have been imposed on the parties by the Board of Transport Commissioners in the declaration that it will not accede to applications for rate increases "due wholly or partly to wage increases until agreement has been reached between the employees and the railways by completion of *the usual processes* of labour negotiation."[1]

The most important function of the Board of Transport Commissioners has been the regulation of railway rates. It has the power "to fix, determine, and enforce just and reasonable rates, and to change and alter rates as changing conditions or costs of transportation may from time to time require." This power does not, however, extend to rates charged for the conveyance of grains and grain products from Western Canada, which were fixed by statute *sixty-three years ago* under the Crow's Nest Pass Agreement, and it is subject to statutory provisions under the Maritime Freight Rates Act.

Between 1920 and 1946 no rate increases were authorized. The formula applied by the Board since 1947, known as the *requirements* method, is designed to provide the Canadian Pacific a "Net Rail Income," which in 1948 was made up as follows:

Fixed Charges	$18,000,000
Dividends (5% on paid up common stock, and 4% on preferred)	21,310,000
Surplus	15,235,000
Total	$54,545,000

A successful appeal by some provinces in 1950 resulted in the apportionment of the fixed charges between rail and non-rail enterprises and the reduction of the total amount to $47,576,579. As the financial structure of the company changes, the amount of each item is naturally revised, although the percentage return to ordinary and preference stock has remained the same. In 1957 an *additional allowance* item of $2,400,000 was included in the "requirements" formula. However, the level of earnings that the Board has from time to time considered just and reasonable has never been attained.

Although the Canadian Pacific has remained the *yardstick* railway, the needs of the Canadian National have also been considered by the Board. Because its operations are being subsidized, however, the Board has emphasized that the C.N.R.'s wage costs "have not been used as a measure in determining expenses and requirements of the Canadian Pacific."[2] Undoubtedly this statement was intended as a rebuke to those who maintained, and some still do, that the National System, being subject to political pressure, gives in to union demands and becomes a pace setter. Regardless of the degree of increase in the Canadian National's costs consequent on wage advances, the additional costs of the Canadian Pacific are given primary consideration when increases in rates are determined. The Board also takes into consideration estimates of costs that might be incurred in the future. Amongst the factors taken into account are the future volume of traffic; what the state of the economy might be; the estimated increase in labour costs; and economies that are likely to result from dieselization and other technological improvements. Traders and certain provinces often objected to the consideration of labour costs on the ground that the Board may become involved in the determination of railway wages. This argument lacks substance; the Board has made it quite clear that it would not authorize rate increases until labour and management have completed the usual processes of negotiation. On the other hand, considering that labour costs constitute over 60 per cent of railway gross expenditures, or to put it more simply, that over 50c from every dollar received by the railways goes to labour, should there not be some form of liaison between the price and wage determining bodies?

[1]Board of Transport Commissioners for Canada, *Judgement and Order*. November 17, 1958, p. 16.

[2]Board of Transport Commissioners for Canada, *Judgement and Order*. November 17, 1958, p. 24.

Between 1947 and 1958 six rate increases were authorized, cumulatively representing an increase of 120 per cent over the general level in effect in 1947. The increases were applied fully on the *normal* rates, which represented only 42 per cent of the total railway traffic. Hence, in terms of earnings, the 120 per cent increase in rates raised the per mile revenue by 55.4 per cent for the Canadian National and 57.9 per cent for the Canadian Pacific. In 1957 approximately 30 per cent of the Canadian Pacific's traffic consisted of grain and grain products, which are conveyed at the statutory rates fixed in 1897, yielding only 9 per cent of the company's freight revenue, some 17 per cent was carried at competitive rates, and 8 per cent at agreed charges. Because the whole burden of increasing rates has fallen on the traffic bearing the *normal* rates, more and more of that traffic has been driven away. For this reason one of the Board's Commissioners declared in 1958 that it was high time for the Board to "bring to the attention of all concerned, and in particular the Government of Canada, the serious situation confronting the Board with respect to its duty to maintain 'just and reasonable' freight rates."[3]

In determining what rates are *just and reasonable,* the Board must consider the interests of both the railways and the public. The railways have been squeezed between rising labour and other costs on the one hand and transport competition on the other, and this limits their ability to obtain the full benefit of higher freight rates. The public has borne the full burden of freight rate increases because what would have fallen on grain and grain products in the absence of the statutory rates has been shifted to other traffics. *If subsidization of agriculture is necessary, as in the national interest, then the Government should raise the present direct farm subsidy. There is no justification in compelling one industry to subsidize another, especially when the former is in financial difficulties itself.*

We have already stated that as long as the general trend of wages is upward, the railways cannot expect the pressure from their employees for higher wages to cease. But their charges are distorted to such an extent as to make it virtually impossible to absorb the higher costs and still maintain a reasonable return to capital. It is estimated (*Saturday Night,* April 11, 1959) that if the rates for the conveyance of grain and grain products had increased by only 50 per cent as much as normal rates had risen since 1914, the Canadian Pacific would have earned $58 million more in 1958 alone. It is imperative, therefore, that the Government either compensate the railways for the movement of grain and grain products, an additional burden on the taxpayer, or take a political risk and abrogate the Crow's Nest Pass Agreement.

In their battle against rising labour and other costs, the railways have been facing another problem, which is rooted in the procedure followed in obtaining rate increases: application to the Board of Transport Commissioners, extensive arguments and counter-arguments, appeal to the Governor-in-Council against the Board's decision, and often reference back to the Board for reconsideration, and a repetition of the initial process with additional representations. The provision for appeal to the Governor-in-Council from decisions of the Board of Transport Commissioners, which has been invoked after every authorization to raise rates, is the cause of considerable delay in putting into effect the higher rates thus depriving the railways of substantial revenue. For example, from the time of the 1946 application for higher rates to the final authorization of increases in 1948, the railways have estimated a loss in revenue of some $150 million. This *time lag* between rising costs and rate adjustments causes an imbalance in operating revenue and operating costs. Furthermore, economic conditions change: when an application is based on the conditions existing at the time, the decision, if it is delayed for very long, may not be in accord with the new situation. For example, the application in 1946 for a 30 per cent increase in rates was designed to offset a 10 cents per hour increase in wages; by April 1948, when authorization was finally granted for a 21 per cent increase in rates, the cost of living had risen so much that the employees demanded and obtained another wage increase.

This problem of procedure and the question of rates for the conveyance of grain and grain products are within the province of the Federal Government. Their existence may be justified on general economic and political grounds; however, the railways are faced with rising costs of materials over which they have no control, and because of increasing living costs and wages generally, pressure from their employees for wage advances, which also must be met. The post-war construction of super highways from coast to coast, the continuous expansion of air traffics, the increasing efficiency of road transports, and the opening of the St. Lawrence Seaway have raised formidable obstacles to the return of railway prosperity. It is imperative, therefore, that artificial obstacles created more than half a century ago, and founded on grounds that no longer exist, should be eliminated.

The deployment of the railways by the Government as instruments for the implementation of economic polices, whether expressed in terms of fostering specific industries or enforcing the effectiveness of price policies, or both, appears to have been accepted

[3]Commissioner H. B. Chase, in "Further Observations" to the Judgement of November 17, 1958, p. 32.

by the public for many years as being in the national interest, regardless of whether such deployment renders the railways incapable of meeting their operating costs. If the Government feels politically and economically committed to low charges for the conveyances of grain and grain products and, in addition, feels compelled to require of the railways the performance of certain other services at charges unrelated to the cost of conveyance, the public rather than the railways must assume the burden.

The fact is that since World War II the rapid increase in industrial productivity facilitated wage increases to industrial workers, which the railways could not and still cannot hope to meet as long as their charges and practices are strictly regulated and they are compelled to maintain un-remunerative services. If the railways are to maintain the wages of their employees at a level comparable to that of other industries and still pay their way, then a re-assessment of their double role—the provision of commercial as well as public services—is urgently required. If it is in the national interest to maintain this dual role, and the Government considers it inadvisable to terminate railway regulations, then, in justice to the railways and to their employees, compensation must be paid for services rendered in the national interest. Annual estimates could be made of the revenue that the railways could have made had they charged the prevailing rates for services rendered at statutory rates and of the cost entailed in providing socially necessary, unremunerative services; compensation to this extent could be paid from the national treasury. The application of such a policy would silence union outcries that their members were in fact subsidizing the services rendered in the public interest by being compelled to accept lower than prevailing wages because the railways could not pay, and the railways could no longer claim inability to pay by reason of having to maintain unremunerative services in the public interest and provide services at regulated rates.

SUMMARY

1. The Canadian National is a consolidation of bankrupt railways originally built to compete with one another. It was not in the *national interest* to let such railways go into receivership.

2. In addition to the system's heavy burden in having to maintain unremunerative services, the Government transferred to it all the debts of the constituent companies; this means in effect that the Government transferred its own railway debt to the national system.

3. Hence the existence of the Canadian National as a public enterprise can only be justified on the ground that it is necessary for the maintenance of a pattern of economic development different from that which would result in the absence of subsidized transportation.

4. If the role of the Canadian National is political, social, and economic, then the company's ability to pay is of no consequence as a wage determinant. In such case the only just standard of measure in determining the salaries and wages paid to employees of the Canadian National is that used in determining payments to other Government employees, namely, comparative wages and salaries.

5. The problem with which we are confronted is this: is it just and equitable to maintain the same social, economic, and political obligations on the privately owned Canadian Pacific as those imposed on the public system? Some would approve of this on the ground that the Canadian Pacific obtained extensive public assistance and privileges during its formative years. This argument has no substance: all early settlers obtained some form of assistance from the Federal and Provincial Governments. Should western farmers be asked to sell their produce at prices below cost because their ancestors were given free land or land at low payments?

6. If there is agreement that the Canadian Pacific should not be imposed upon by the same obligations as those imposed on the National system, and certainly we cannot have two policies—two scales of rates, two sets of regulations—a new railway policy is necessary.

CONCLUSION*

The refusal by the railways to grant their non-operating employees the full 14 cents per hour wage increase recommended by the Milvain Board was justified and should have been given maximum public support. The fact is that the recommendation for an increase was not unanimous—it was made by the union nominee and the chairman—and hence cannot be regarded as totally impartial. Furthermore, the board did not possess the necessary comparative data to make valid pronouncements on the comparability of jobs between industries.

The recommended increase in railway wages by 14 cents an hour was based on a comparison between wages in railways and durable goods industries. The recognition by the Board of wages in the durable goods industries as a just standard of measure was based on the erroneous assumption that conditions in the two industries have remained the same as they were in 1950, when this standard of comparison was

*This conclusion and suggestion number 7 were added to the original manuscript by Dr. Peitchinis on May 4, 1961.

suggested by the railways. Just because a certain standard of measure is adopted as equitable one year does not mean that that same standard is necessarily equitable in perpetuity. Over time, the job contents of the various skills change, and so do the relative positions of the industries themselves: a high level of activity in one industry does not necessarily coincide with one in another industry. Account must be taken of the possibility that the equilibrium relations have shifted; thus wages in one industry may be depressed relative to another because it is adversely affected by the decline in world commerce. Hence over short periods of time wage disparities between industries must be recognized and accepted. For example, the present industrial situation is abnormal, and the workers in some industries, because of their particular positions, have attained a level of remuneration that is out of relationship to that of workers (wage earners as well as salaried employees) who possess equal skills and, in many instances, have greater responsibilities.

It is extremely easy to be mislead by basing wage comparisons upon a specific trade or even a group of trades: a general view must be taken when comparisons are made between industries, and consideration must be given to the economic situation. Definite standards of comparison are hard to establish: in the case of the railways no single industry should be accepted as an equitable standard of measure. The level of wages prevailing in other countries should be taken into account, Furthermore, since the economic positions of individual firms are never the same at any point of time or in any particular year, the average wage of a number of years should be used as a standard of comparison rather than the one prevailing at the time of contract negotiations.

In 1958 the index of average weekly earnings of Non-Operating Railway workers stood at 191.1 (1947=100), whereas those of Building and General Engineering workers, and workers in Durable Goods industries stood at 217 and 192 respectively. Assuming that these three industries were strictly comparable in 1947, must we conclude that workers in durable goods industries are entitled to an average wage increase of 25 index points, and non-operating railway employees to an increase of 25.9 index points? Such a recommendation would have no logical foundation; for it would rest on the asumption that since 1947 the relative positions of the three industries in terms of profitability, occupational structure of their respective labour forces, job content of the various skills, conditions of work, and other factors have remained the same.

If, for example, the occupational structure of the labour force employed by the durable good industries should change in such a way that there is a proportionately greater concentration in the highly skilled high paid occupations than in the other industries, the average weekly wage of employees in durable goods industries would rise without any actual increase in wage rates. Furthermore, consideration should be given to the fact that employees of the building and durable goods industries might have regarded their actual wages in 1947 and up to 1950—when railway employees had a small advantage over them—as unduly depressed relative to those of railway workers. In such a case a percentage increase to railwaymen comparable to those granted to workers in the other industries would result in proportionately greater demands by the latter. Such a development could well lead to a series of leap-frogging claims up an unending stairway.

SUGGESTIONS:

1. Divide the railway system into competitive and non-competitive areas.
2. In competitive areas, i.e., areas in which the railways compete for freight with highway and/or water, give the railways freedom to set their charges as well as freedom in operations.
3. Retain rate controls in areas where the railways still have a substantial measure of monopoly and there is no possibility in the foreseeable future of the emergence of competition.
4. In addition to having control over rates, the Board of Transport Commissioners should be empowered to decide whether effective competition exists and accordingly lift or impose rate controls.
5. Determine which lines are maintained because of the National interest, but have little or no commercial merit, and what products are conveyed at charges that are determined by political considerations and with a view to benefiting the whole economy. For these the public must bear the full burden of revenue deficiencies from operations.

   In the final analysis it is not a question of subsidy or no subsidy but rather the form of subsidy that will not invite exhorbitant demands from labour nor induce managerial inefficiency.
6. *Revise Our Conciliation Machinery.* Conciliation Boards, as presently constituted, are not suited, nor have their members had the necessary qualifications, to make valid pronouncements on the comparability of jobs between industries. Hence any recommendation for a wage increase based entirely on assumed rather than verified job comparability could not be sustained.

As presently constituted, our conciliation machinery is most ineffective. The composition of Concil-

iation Boards has been laid down by an Act of Parliament. Because, however, Parliament had to satisfy labour, management, and the public, provision was made for the representation of all three parties on each Board. Labour-management committees and councils at various stages of the work process are desirable and indeed necessary. When agreement cannot be reached through negotiation and either party decides to appeal, however, the body empowered to give a final decision (even though not legally binding on the parties) should be so constituted as to be impartial. For only when the members of a board have no vested interests or allegiance in the institutions or to the parties involved in the dispute, can they examine the issues realistically by giving due weight to all factors to be considered.

Every report of Conciliation Boards reveals that the nominees of the parties to the disputes consistently have shown a total lack of moral obligation to examine impartially the issues involved. Invariably one reads in their reports little more than what their respective nominator presented to the Board.

Conciliation of labour-management disputes is founded on the belief that if a board composed of unbiased men of repute failed to bring the parties together and conclude an amicable settlement, public opinion would force them to accept its report. The boards have failed in both respects because of their partisan composition. Since the unions and the employers nominate strong advocates of their causes and pholosophies, boards begin hearings with two of their three members dogmatically convinced in the righteousness of their nominator's case. At the end, if a majority report is to be presented at all, the chairman (the only independent member) is necessarily forced to side with the representative of labour or management depending on whose stand is less objectionable. Such reports cannot and should not be treated as being impartial.

To achieve impartiallity in conciliation, the unions, the railways, and the government should select together three or more persons, well-known for their impartiality, to form a permanent conciliation, board, not a permanent administrative body but rather permanent in composition, to replace the present practice of appointing new people to each board. This will give the members ample time to acquaint themselves more thoroughly with labour-management problems.

7. The settlement of the dispute between the railways and their non-operating employees has left unsolved the main cause of the dispute, namely, the issue of comparative wages. For a permanent solution of the problem, I suggest that:

   i) In co-operation with management, and the unions, the Government appoint an impartial committee, comparable in composition to the Guillebaud Committee in the United Kingdom, to determine: first, what jobs in other industries are similar and require the same degree of skill and responsibility as those performed by railwaymen, and second, what wage adjustments are necessary, not a flat rate or a definite percentage adjustments for all, but rather for each grade separately, to bring them in line with those paid in other industries;

   ii) The parties should agree to accept the committee's unanimous recommendations.

   When we have a list of comparable occupations we will be able to determine, now as well as in future negotiations, whether individual grades and occupations of railway workers deserve wage increases.

STAFFING THE BANKS

It is widely recgnized that staff problems are now causing the banks the utmost concern. In quantitative terms, admittedly, the present problems are perhaps less acute than those of, say, 1955, when the banks were unable to secure an adequate proportion of school leavers, and, moreover, they should become easier as the "bulge" of post-war babies leaves the schools and passes into the labour force, an occurrence that will coincide with the termination of national service. In qualitative terms, however, the problems seem more acute than at any previous time and likely to become steadily more pressing as the banks advance further into specialized fields such as investment management, longer-term lending and, looking further ahead, feel the impact of electronic bookkeeping techniques. The problem facing staff managers in every bank to-day is not simply to find the men but to find men of the right potential calibre to meet the challenge of the new techniques of banking. It is a test, above all, of methods of recruitment—a field in which, it must be confessed, the banks have lagged far behind the Civil Service and most big public companies. For this reason it is welcome news that the eleven London clearing banks have jointly taken the initiative in arranging with the Incorporated Association of Headmasters a convention on banking as a career. This is the first meeting of this kind and may well be the precursor of a new campaign to attract the bright sixth-former into the banks.

—W. J. Thorne, *The Banker*

THE VARIABLE ANNUITY DEBATE

Mr. Lusztig notes that while variable annuities differ as between plans, the basic principles are simple and straightforward. The concept, however, is the focus of spirited controversy in insurance circles.

PETER LUSZTIG

Though the variable annuity concept can be traced back to the 16th century England, it has only recently—in the last decade—become the focus of spirited controversy in insurance circles. The schools of thought are sharply divided. There are those on the one hand who feel that variable annuities and life insurance are two very different schemes to be kept distinct and separate. There are others who point to the persistent though irregular tendency towards lower purchasing power of the dollar[1] and claim a partial solution to the resultant dilemma of those who do plan towards retirement and old age. While most Canadian life insurance companies watch closely from the sidelines,[2] two of the largest U.S. concerns, the Prudential Insurance Company of America and the Metropolitan Life Insurance Company, continue to wage their drawn-out debate on variable annuities —the former in favor, the latter against.

Though variable annuities differ as between plans, the basic principles behind such annuities are simple and straight forward.[3] Unlike conventional annuity contracts, which guarantee a fixed dollar income, variable annuities provide for the investment of contributions in equities, as a direct consequence of which benefits will fluctuate. An attempt is made to provide periodic payments, the actual dollar amount varying in relation to the cost-of-living rather than being a guaranteed fixed amount. It is felt by proponents of the scheme that through prudent investment, by insurers, in common stocks and other equities, a more consistent purchasing power of pensions can be maintained.[4] While it might be argued, however, that Canada's recent two percent compounding annual rate of inflation could have been offset through investment in equities, it should also be noted that there is no necessary or historical connection between our cost-of-living and the index of stock values.[5]

Today's best known variable annuity is the College Retirement Equities Fund and as such will be used for illustrative purposes.[6] It is designed for university teachers, a somewhat more sophisticated clientele than life insurers can expect. Participants in CREF can allocate up to half of total premiums towards the university retirement system to the equity fund, leaving at least one half to the purchase of a fixed dollar annuity. Each premium paid to CREF purchases "accumulation" units representing the participants share in CREF. When common stock prices, and therefore unit values, are lower, a given premium purchases a greater number of "accumulation" units; when they are higher, fewer *accumulation* units are purchased. Dividends are treated as additional premiums. On retirement, the participants *accumulation* units are converted into a lifetime income expressed in terms of *annuity* units. These units are revalued at the end of each fiscal year, providing more dollars of income when stock prices and dividends are high and fewer dollars when the opposite is the case.[7]

[1]Taking the 1947-1949 U.S. dollar as equal to 100 cents, the dollar in 1955 was worth 87 cents in purchasing power; it was worth $2.94 in 1900 and $4.35 in 1850.

[2]Several companies registered under federal statute are no doubt prepared to offer variable annuities immediately following the forthcoming amendments (Bill S-5) to the Canadian and British Insurance Companies Act. The amendments would make such offerings feasible. See "Big Money Flows Into the Market if Ottawa Moves," *The Financial Post,* February 4, 1961, p. 1.

[3]For an excellent discourse in this area see R. I. Mehr, "The Variable Annuity: Security or Insurance," *Journal of Finance*, Vol. XIII (September, 1958), pp. 386-411.

[4]See for example, R. M. Duncan, "A Retirement System Granting Unit Annuities and Investing in Equities," *Transactions of the Society of Actuaries,* Vol. IV, Meeting No. 9, pp. 317-342.

[5]This latter consideration is advanced by, G. F. N. Smith, "Life Insurance or the Securities Market?" *Life Underwriters News,* Vol. 46 (October, 1960), p. 22.

[6]Created in 1952 by a special act of the New York Legislature as a non-profit educational corporation to write variable annuities for employees of universities and colleges. For an interesting summation of an economic study which preceded CREF, see W. C. Greenough, *A New Approach to Retirement Income,* Teachers Insurance and Annuity Association of America, 1951.

[7]Mortality experiences and expenses are also considerations.

It is obvious that the crucial decisions to be made by insurers of variable annuities will be those decisions concerned with investment policy. A balance between equities and fixed dollar investments must be defined and maintained, for no recipient of retirement income, no matter how logical or well informed, would comprehend adverse or violent fluctuations in the amount of HIS OWN income. It has even, on occasion, been suggested that some buyers of *variables* will expect their purchase to be risk-free because it is established insurance companies that buy the common shares on their behalf.

Any attempt to actively promote variable annuities in Canada would pose severe problems. This paper presupposes revisions to relevant statutes. What is of great interest and significance, and requires further attention is the probable economic impact of any boom in the sale of variable annuities. It would affect almost every channel of saving and investment in this country and, because of the likelihood of more direct placement of new issues of common stock with insurers, would affect the investment dealers as well.

One might consider the repercussions likely to be felt in the stock markets. Stock market implications include the supply and demand for common shares as well as the matter of corporate control. At the present time, Canadian life companies can hardly be considered significant buyers of common shares.[8] It should be noted, however, that Canadians put almost two hundred million dollars into the purchase of fixed dollar annuities from life insurers in 1959,[9] and that this amount will increase substantially over the next twenty years.[10] One is not unrealistic, therefore, in assuming that if the way were cleared for offerings of variable annuities, within a short period of time, insurance companies would prove potential buyers of a net of over one hundred millions of dollars worth of better grade common stocks each year. This would represent new monies in the stock market and ignores the possibility of any switching out of mutual funds and into *variables*.

Thus, there would be an annual increase of close to ten per cent in the value of common stock presently being traded on major Canadian exchanges—stock that is of the type likely to be acceptable to insurers.[11] The effect on price-earnings ratios in view of the indicated thin market (see table I) for accept-

[8]See Bank of Canada, *Statistical Summary,* Ottawa, February, 1961, p. 103.

[9]Report of the Superintendent of Insurance for Canada, Ottawa. 1960.

[10]See submission to the Royal Commission on Canada's Economic Prospects by the Canadian Life Insurance Officers' Association, 1956, entitled "The Significance of Life Insurance in the Canadian Economy."

[11]Just over $800,000,000 in securities, other than mining and oils, were, for example, traded on the Toronto Exchange during 1960. There has been a significant rise in trading in the first two months of 1961 over 1960 levels.

TABLE I

CHANGES IN THE SUPPLY AND DEMAND FOR STOCKS (CANADA)

(in millions of dollars)

	1954	1955	1956	1957	1958	1959	1960
Net New Common Stock	147	367	514	427	273	340	153
Net New Preferred	25	95	176	88	27	73	35
NET NEW STOCK ISSUES	172	462	690	515	300	413	188
CHANGES IN CANADIAN HOLDINGS OF:							
Can. Life Insurers — Common	2	2	6	7	10	12	)
Can. Life Insurers — Pref.	-7	-1	-3	-2	-3	-5	) 15
Pension Funds — Common	n.a.	n.a.	n.a.	26	78	57	n.a.
Pension Funds — Preferred	n.a.	n.a.	n.a.	1	- 5	-3	n.a.
Canadian Mutual Funds — Pr. & C.	33	22	48	30	62	134	n.a.
Non-Resident Owned Funds — Pr. & C.	102	68	70	74	14	-12	n.a.
Other Foreign Portfolio Investment — Pr. & C.	32	140	183	99	101	150	n.a.

Sources. Bank of Canada Financial Supplement,
Reports of the Superintendent of Insurance for Canada,
DBS Trusteed Pension Plans,
Monthly Review of the Bank of Nova Scotia, October, 1960.

able common shares would be such as to force a shift to U.S. equities. It should be recognized, however, that the supply of good U.S. common shares may in time prove inadequate because of institutional demand there. In fact, for some time, only a small percentage of the outstanding shares of Du Pont, Union Carbide and Carbon, and comparable situations have been traded.[12]

The possibility of heavy buying of U.S. common stock by Canadian Institutional Investors does in itself present a stimulating topic for controversy and discussion.[13] Further, the periodic shortage of mortgage monies, a significant portion of which—some 30 per cent—is supplied by life insurance savings, would be somewhat aggravated. This latter situation does have political implications that might in time bring pressures to bear on the life insurance industry.

Some evidence of the thin market for Canadian securities is provided by studying the price earnings ratio of those stocks that appear to be the favorites of our mutual funds. It is worth noting that close to fifty per cent of the over $300 million increase in the portfolios of mutuals between 1955 and 1960 represented purchases of common stock in but twenty firms.[14] These twenty corporations include Calgary Power (price-earnings ratio of 28), Moore Corporation (29), Aluminum Ltd. (27), British American Oil (28), and the Bank of Nova Scotia (28).[15] The ratios are representative of many of the twenty concerns and are somewhat higher than what is accepted as being typical within the respective industry groupings. The composite price-earnings ratio of the twenty

[12]See L. E. Morrissey, "Dispute Over the Variable Annuity," *Harvard Business Review,* Vol XXXV, No. 1 (January-February, 1957), pp. 75-84.

[13]See remarks by Mr. J. E. Coyne on the "Balance of Payment Problems in North America" delivered at a meeting of the Economic Club of New York, March 7, 1961.

[14]"Where Mutual Funds Invest: Half the Cash in 20 Stocks," *The Financial Post,* September 24, 1960, p. 26.

[15]Ratios at the end of March, 1961.

TABLE II

SELECTED MAJOR INVESTMENTS OF CANADIAN LIFE INSURANCE COMPANIES

(As a percent of total and based on book values)

	1950	1957	1959
Bonds - Government of Canada	18.55%	4.15%	4.75%
Provinces	5.15	4.50	4.65
Commonwealth	7.98	3.64	3.38
U. S. A.	N.A.	1.48	1.51
Canadian Local Authority	3.89	5.00	4.93
Canadian Transportation	0.47	1.07	0.93
Canadian Public Utilities	4.63	5.12	5.19
U.S. Public Utilities	8.24	6.58	5.73
Canadian Industrials	4.64	5.69	4.67
U.S. Industrials	3.32	3.81	3.47
Other Industrials	0.86	2.00	1.99
Total All Bonds including above	66.26	49.67	47.79
Total Preferred Stock	2.86	1.59	1.43
Common Canadian Public Utility	0.87	0.14	0.15
U.S. Public Utility	0.15	0.77	0.70
Canadian Industrials	0.43	0.50	0.59
U.S. Industrials	1.35	1.36	1.14
Other Industrials	0.02	0.16	0.46
Total All Common Including Above	3.14	3.40	3.59
Mortgage Loans	18.14	34.24	35.37
Real Estate	1.22	3.20	3.28

Source: Reports of the Superintendent of Insurance for Canada.

stocks comprising the Toronto Industrial Index is under eighteen.[16] The ratios are of course significant in that for variable annuities to achieve their desired aim, capital appreciation and dividends must be in excess of what Canadian insurers are presently able to net on their investments.[17] Further pressures by institutions on the demand side may make attainment of a net of over five per cent extremely difficult to achieve.

If one were attempting a contrast between variable annuities and mutual funds, attention would have to be given to three main points. First of all, by electing the appropriate plan, an annuitant can be assured against outliving his income. Investment in a mutual fund can afford such protection only through conversion, but a single premium immediate annuity, dependent on the price level of common shares, injects an undesirably speculative feature.

Next, the conversion of an investment in a mutual fund into cash is easier than the conversion of variable annuities. The mutual is far more liquid, as annuity holders will, in most cases, face limitations on cashing in their policies. Finally, there are varying tax considerations.

If in the near future attempts are made to improve the employment picture through say low interest rates, subsidies, heavy deficit financing, or other similar means that are recognized as inflationary,[18] the variable annuity will once again be topical. In Canada over the next decade, however, it is unlikely to prove feasible or acceptable, except on an extremely modest scale.

[16]Taken from the Toronto Stock Exchange Statistical Summary for the week ending March 30, 1961.

[17]The Canadian Life Insurance Officers' Association released a figure of 4.80 per cent NET for 1959.

[18]Improbable. See the 1960 annual report of the governor of the Bank of Canada to the minister of finance.

CAPITAL PUNISHMENT

The balance of payments, then, furnishes no excuse whatever for changing today's tax laws. To do so, moreover, would carry grave risks. By penalizing outlays by U.S. businessmen in other industrial nations, it would discourage private investment in the very areas where it has been most useful and profitable in the past, and apparently holds most promise for the future. As a result, capital seeking a favorable return would be kept at home, in a melancholy resurgence of economic nationalism; it scarcely would flow in quantity to underdeveloped lands, from Indonesia to the Congo, which not only have little investment opportunity to offer, but also cherish a deep-seated suspicion of capitalistic ways. To the extent that it succeeded in luring dollars into backward lands, such legislation would open a Pandora's box of tax inequity. Finally, any such attempt to channel investment solely into areas favored by Washington would undermine further this nation's deteriorating competitive position.

The last point underscores a truth rarely appreciated. U.S. business activities abroad yield this country not only dollars and cents, but also a rich harvest of technological know-how. For no nation can claim a monopoly on scientific advance. Just last week, for example, Proctor & Gamble announced plans to build a new research and technical center in Brussels. Comparable investments by major U.S. concerns, across the whole spectrum of business, have enabled this country to enlist the ingenuity and skills of workers and scientists of many lands. The benefits inevitably flow not only to subsidiaries abroad, but also to corporate parents at home. It is worth recalling that such versatile wonders as Dacron and polyethylene were invented by the British, polypropylene by the Italians and urethane foam by the Germans. The oxygen converter, which now is remaking the face of the U.S. steel industry, originated in Austria. Chemical refining of metal was achieved by a Canadian. Time after time, U.S. industry has received a bold—and profitable—impetus from some foreign discovery.

For over a generation, then, tax incentives to private investment abroad have more than paid their way. Today, with the U.S. beset at home by high costs and other obstacles to vigorous competition, they are more than ever necessary and desirable. Changing the law, to imprison private capital within the nation's borders, would be a costly error. If the Administration truly wishes to seek out and explore new frontiers, it can do so most effectively by unleashing rather than hobbling the energy and the enterprise of the American businessman.

Barron's, April 1961.

Impact of a Shopping Centre:

The Wellington Square Experience

What is to be the future of downtown shopping in the face of the growth of surburban shopping centres? In this article, the author describes a study of the effects of the first downtown shopping centre in North America.

JOSEPH N. FRY

In August 1960, a unique shopping centre called Wellington Square opened in the heart of downtown London, Ontario. In one step, over 400,000 square feet of retailing space was added to the existing 1,200,000 square feet of retailing space in the downtown area.

This project surely ranks as a noteworthy example of all-out effort to develop and consolidate the core area of a city, particularly at this time of general concern about the future of metropolitan *downtown* areas. What sort of thinking was behind this development? How has it affected downtown London? What is the outlook for the future? This paper will attempt to answer these and other questions by reviewing the history of the project, by presenting research data on the effects of the project on London retailers and consumers, and by commenting on the problem of future development.

BACKGROUND

The city of London is centrally located in a fast growing and prosperous seven-county trading area in Southwestern Ontario. As can be seen from Exhibit 1, London serves as a focal point for a number of highway systems and is thus highly accessible from every direction.

The approximate limits of the London trading area are outlined by the shaded areas on Exhibit 1.[1] Total retail sales within this area were estimated at about $195,000,000 in 1960.[2] The total population of this trading area is about 500,000 people, with about 165,000 living within the limits of metropolitan London. Family buying power in the trading area is an estimated 19% higher than the average for Canada, and income levels in London proper are about 24% above the national average. As a whole the trading area ranks as the 11th largest in retail sales in Canada.

London's downtown or central business district is generally defined as the area within the rectangle formed by Queens Avenue on the north, Wellington and Ridout Streets on the east and west respectively, and York Street on the south. Dundas Street is regarded as the major traffic and shopping artery, and the corner of Dundas and Richmond Streets is generally considered the key intersection in the city. These streets and the boundaries of the downtown area can be traced on Exhibit 2. The major institutions in downtown London, such as the Market Parking Building, Simpson's London Ltd. department store, and the Wellington Square shopping centre can also be located on Exhibit 2. An important subsidiary shopping district known as the East London shopping area is located about one mile east of the downtown area on Dundas Street. It includes a major furniture store and large clothing stores.

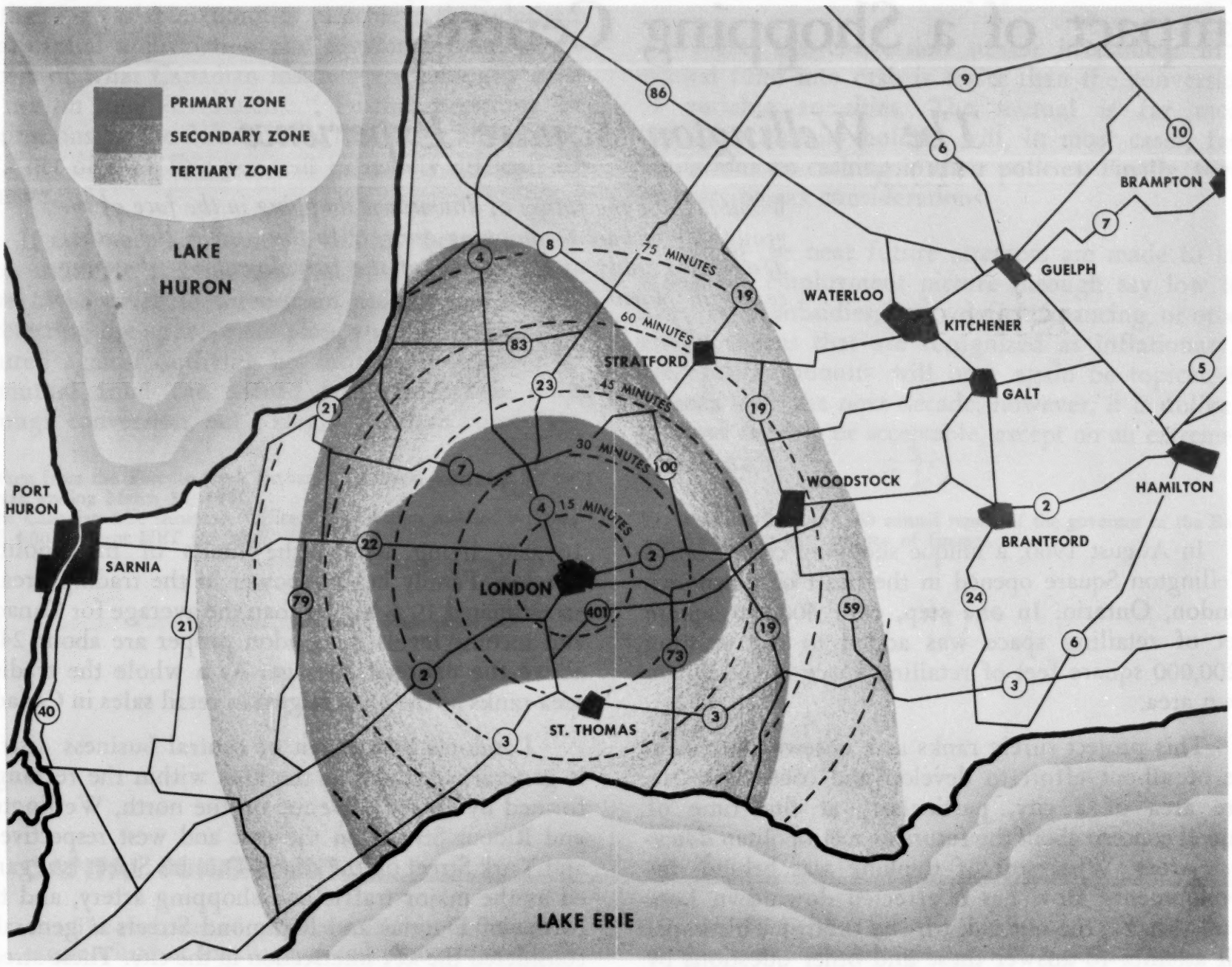
Wellington Square occupies the full block bounded by York, Wellington, Clarence, and King Streets. It was first announced by the developers, Webb and Knapp (Canada) Ltd., early in 1958. Construction started later that year, and the doors were opened for business August 11, 1960.

The principal tenant in Wellington Square is the T. Eaton Co. Ltd., which operates a 250,000 square foot department store. Other key tenants include a Dominion Stores Ltd. supermarket, a F. W. Woolworth Ltd. variety store, and a major furniture store. In sum, there are about 40 tenants in Wellington

[1]This trading area information was obtained from a brochure, published by Webb and Knapp (Canada) Ltd. and based on a survey conducted prior to the construction of Wellington Square.

[2]Food purchases were included in this estimate only for the primary or darkest zone; for the tertiary or lightest zone only department store and apparrel expenditures were included.

EXHIBIT 1



Square, offering the consumer a fairly complete line of convenience, shopping, and specialty goods.

Wellington Square is the first such shopping centre built downtown in any North American city. It includes a fully enclosed, air-conditioned shopping mall, parking facilities for 850 cars, and offers a number of special services such as coat checking, public washrooms, and emergency medical facilities. Other details on this project can be found in Exhibit 3.

JUSTIFICATION OF THE DOWNTOWN LOCATION

Justification of the downtown location of this huge project rested primarily on the conclusion, drawn from market studies, that total retail sales in downtown London could be substantially increased by the drawing power of additional retailing facilities. It was reasoned that the existing downtown facilities and the new Wellington Square would complement each other, together forming a strong new attraction to trading area consumers. Conversely, it was undoubtedly concluded that the strength of this attraction would be greatly reduced if Wellington Square were located in a suburban district, with a net result of a lower potential sales volume.

The validity of this conclusion, that total sales could and would be expanded, was of crucial importance to both the existing downtown merchants and the prospective Wellington Square merchants because of the tremendous increase in retailing capacity that Wellington Square represented. It could reasonably be assumed that Wellington Square would require a sales volume of $20-25 million annually to operate profitably. The whole downtown area, prior to Wellington Square, was only doing an estimated $55 million annually.[3] Either total sales had to be expanded within a reasonable period of time, or the complete downtown area, including Wellington Square, would be in a state of gross overcapacity and in trouble. The $55 million of existing business could not be spread over the total retailing capacity and support efficient, profitable operation.

[3]Brochure by Webb and Knapp (Canada) Ltd.

The developers, their researchers, and the principal tenant were convinced that their conclusion was valid and argued publicly that total sales would not only be increased, but that they would be increased to such an extent that the existing downtown merchants would not suffer. Their reasoning is best elaborated in these excerpts from the London Free Press.[4]

> In Wellington Square, the annual meeting of the London Downtown Association was told last night, core area merchants will not encounter competition but rather a stimulus which will help them tap a presently untouched $40,000,000 shopping potential.
>
> W. A. Smith, economist with T. Eaton Co., said he imagined local merchants viewed the entry of Eaton's into the city with mixed feelings, perhaps misgivings.
>
> 'You may be thinking: What will these new stores do to my business?' and he assured they will stimulate trade.
>
> Between 1951 and 1958, population of the London trading area increased by 56,000 for an approximate increase of $40,000,000 annually in food and department store merchandise, $27,000,000 of which is department store buying.
>
> This would require the addition of 540,000 square feet of store space in downtown London, at an average rate of sales per square feet, if all the additional business were done here.
>
> But since 1951, apart from the 40,000 square feet added by the Simpson's London Ltd. in 1955, there has been no substantial increase in the 1,014,000 square feet of non-food retail space which existed in 1951 in the downtown area, bounded by Queens Avenue, Wellington, York, and Talbot Streets.
>
> Wellington Square will add about 342,000(sic) square feet of non-food retail space. The additional facilities offered shoppers for comparison shopping will induce people in the trade area to buy more of their needs in the central business district, Mr. Smith said.
>
> 'We would not be here if we did not believe that there was ample evidence of a need for new facilities,' he assured, explaining that the Square is looking for its sales volume, 'not from your sales, but from the amount of unsatisfied business potential that is presently being done away from London and the needs of additional population of London in future years.'

[4]The London Free Press, March 6, 1959.

> When Mr. Smith finished his address, Fred Kingsmill Sr., in thanking him, said he not only had set at rest any fears but had convinced the merchants they would prosper instead of lose business because of Wellington Square.

Additional justification for the downtown location of the Square, paricularly from the point of view of the existing retailers and civic officials, was the probable influence the Square would have in consolidating the downtown area and discouraging suburban shopping developments. Views expressed regarding this benefit were:

> "... (Wellington Square) will preserve London as a city ... as a centre that will go on without fear of decentralization or suburban shopping centres."[5]
>
> and
>
> "For downtown areas everywhere, Wellington Square represents a shining example of how a city can strengthen the appeal of its central business district. It promises downtown a new lease on life in its struggle to maintain the affections of the convenience minded consumer in the face of intense competition from the suburbs."[6]

REACTION OF THE DOWNTOWN MERCHANTS

The immediate reaction of the merchants in the downtown area to the proposed Wellington Square seemed to be one of mixed feeling. Some (particularly in private conversations) viewed Wellington Square as a dangerous competitive threat. Others saw the project as the key to revitalizing the whole downtown area.

The majority view was no doubt expressed through the Downtown London Association, an association of the central business district merchants, which came out in favour of the Wellington Square development. The reasons given for favoring the project were: (1) the increased sales that would result from the additional drawing power and (2) the reduction of the threat of a major suburban shopping centre.

THE RESEARCH STUDY

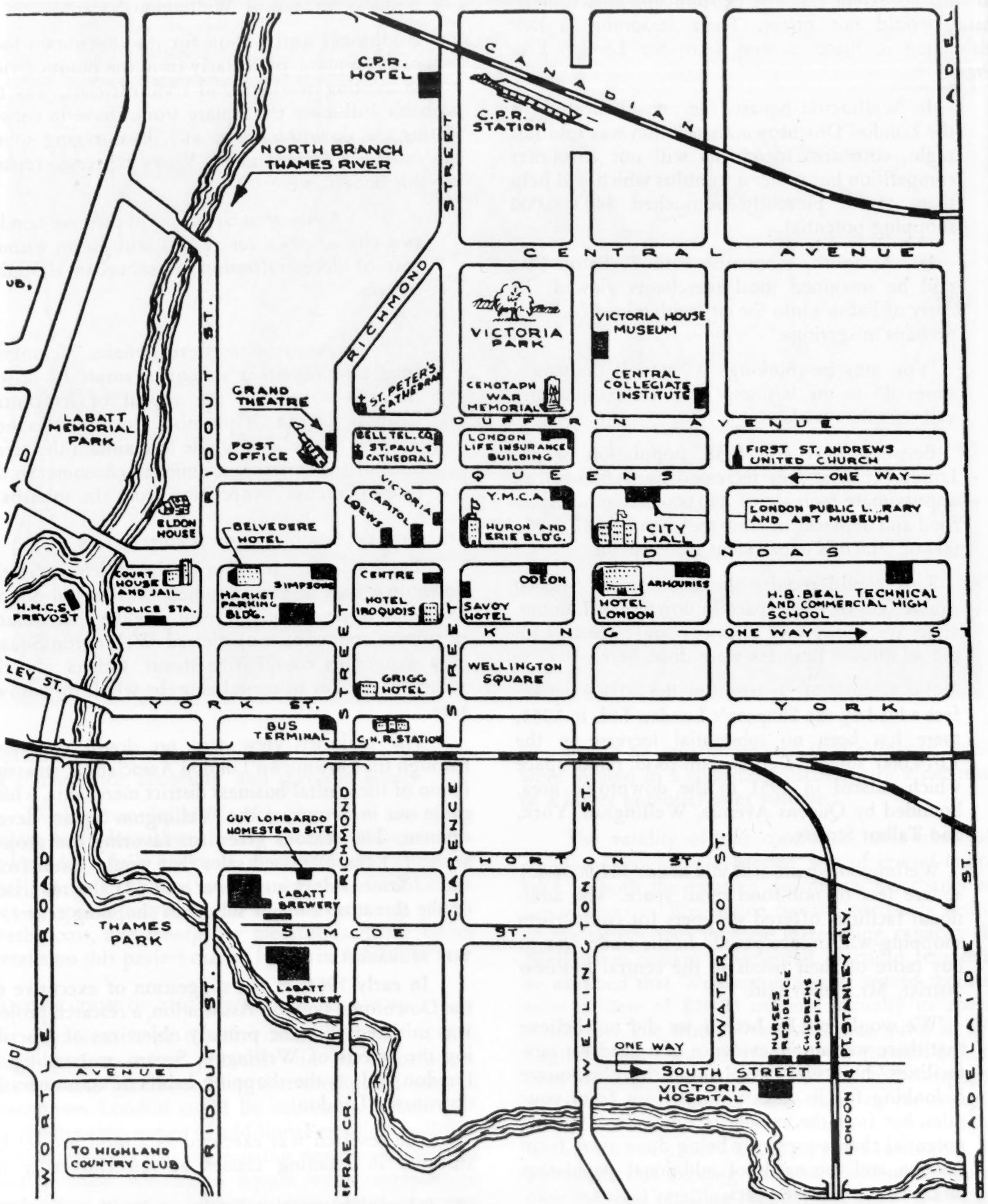
In early 1961, at the suggestion of executive of the Downtown London Association, a research project was initiated with the primary objectives of describing the effects of Wellington Square on retailing in London and on the shopping habits of consumers in downtown London.

The research was executed as a term project by students in retailing classes at the University of

[5]W. Zeckendorf Jr., quoted in The London Free Press, August 27, 1958.

[6]The London Free Press, August 10, 1960.

EXHIBIT 2


C.P.R. HOTEL
C.P.R. STATION
CANADIAN
NORTH BRANCH THAMES RIVER
RICHMOND STREET
ADELAIDE
CENTRAL AVENUE
VICTORIA PARK
CENOTAPH WAR MEMORIAL
VICTORIA HOUSE MUSEUM
CENTRAL COLLEGIATE INSTITUTE
OUFFERIN AVENUE
GRAND THEATRE
POST OFFICE
ST. PETER'S CATHEDRAL
BELL TEL. CO.
ST. PAUL'S CATHEDRAL
LONDON LIFE INSURANCE BUILDING
FIRST ST. ANDREWS UNITED CHURCH
ONE WAY
QUEENS
LABATT MEMORIAL PARK
RIDOUT ST.
ELDON HOUSE
BELVEDERE HOTEL
VICTORIA
CAPITOL
LOEWS
Y.M.C.A
HURON AND ERIE BLDG.
CITY HALL
LONDON PUBLIC LIBRARY AND ART MUSEUM
DUNDAS
COURT HOUSE AND JAIL
POLICE STA.
H.M.C.S. PREVOST
MARKET PARKING BLDG.
SIMPSONS
CENTRE
HOTEL IROQUOIS
ODEON
SAVOY HOTEL
ARMOURIES
HOTEL LONDON
H.B. BEAL TECHNICAL AND COMMERCIAL HIGH SCHOOL
ONE WAY
KING
WELLINGTON STREET
GRIGG HOTEL
WELLINGTON SQUARE
YORK ST.
BUS TERMINAL
C.N.R. STATION
GUY LOMBARDO HOMESTEAD SITE
RICHMOND
CLARENCE
HORTON ST.
WATERLOO ST.
LABATT BREWERY
THAMES PARK
SIMCOE ST.
LABATT BREWERY
NURSES RESIDENCE
CHILDRENS HOSPITAL
PT. STANLEY RLY.
ONE WAY
SOUTH STREET
VICTORIA HOSPITAL
WORTLEY ROAD
AVENUE
RIDOUT ST.
FRAE CR.
TO HIGHLAND COUNTRY CLUB
LONDON
ADELAIDE ST.

Western Ontario, School of Business Administration, under my general supervision. These students worked in three separate research teams and reported their results independently. I have combined these results and, in addition, added material from some personal research on these problems.

The same general research methodology of interviewing and questioning merchants, shoppers, and interested officials was followed by the various research teams. Interviews were obtained with a representative group of over 40 merchants selected from Wellington Square, the rest of the downtown area, and the East London shopping area. Wherever possible, tangible measures, such as indexed sales volume figures, were sought from the merchants to substantiate opinions. To ensure as candid and valid opinions as possible all the interviewees were assured that the information on individual operations would remain confidential.

A total of 460 interviews with shoppers were carried out by the teams in the downtown district. The shoppers were selected at *specified* times and places in the downtown district, with the objective of obtaining as good a cross-section of downtown shoppers as possible. They were questioned regarding frequency of visits to downtown London, expenditures before and after Wellington Square and their shopping patterns.

EXHIBIT 3

WELLINGTON SQUARE IN A NUTSHELL

Location: Wellington, King, Clarence, and York Streets in downtown London.
Cost: About $11,000,000.
Total Land Area: 262,000 square feet (6 acres).
Total Construction Area: 835,000 square feet.
Total Retailing Area: 420,000 square feet.
(T. Eaton Co. Ltd. - 250,000 square feet
(Dominion Stores Ltd. (Supermarket) 36,000 square feet.
(Other - 134,000 square feet.
Store Facilities: About 40 stores including furniture, clothing, variety, book, photographic equipment, bank, shoes, and restaurant. Includes space for professional offices.
Parking: Space for 850 cars or about 4,000 cars per day.
Features: Air conditioned shopping mall, emergency medical facilities, public washrooms.

It would probably be worthwhile at this point to make explicit some of the limitations in this study. Perhaps the biggest limitation is with respect to timing: one might well argue that it is too soon to evaluate the results of Wellington Square. I would certainly agree that it is early, and that all the changes may not have run their full course. Therefore, the research does not purport to represent the final effects but rather the effects *to date*. Other limitations lie in the difficulty of establishing a distinct cause and effect relationship between some events and the opening of Wellington Square. This cause and effect relationship will therefore be handled carefully; for example, sales changes will be related not only to Wellington Square but to the overall economy. Very real limitations on the amount and kind of research we could do were posed by our limited time and nonexistent budget. Finally many of the findings are based on personal opinions, and these are, of course, subject to bias.

THE RESEARCH FINDINGS

The findings of the research groups will be presented in two broad divisions: (1) the effects of Wellington Square on retailing in London and (2) the effect of Wellington Square on downtown shoppers.

Effects on Retailing.

For convenience in the following discussion, the merchants that were operating in the downtown London prior to the opening of Wellington Square will be referred to as the Downtown merchants or East London merchants as the case may be, and the new Wellington Square merchants will be referred to as such. The combination of the Downtown merchants and Wellington Square merchants will be referred to as the Central Business District merchants.

i) *Effect on Sales Volumes.* With a few exceptions, sale volumes of both Downtown and East London merchants have decreased a conservatively-estimated 10 to 15% from 1959 and early 1960 levels. Many stores, both large and small, admitted to, or were reported by reliable sources to, having suffered a much greater percentage decrease in sales. In some cases this decrease in sales was as high as 40%. Stores selling primarily convenience goods seemed to have suffered the most; those selling specialty goods, with some exceptions, seemed to have suffered least.

By March, three stores in Wellington Square selling convenience goods had reached the sales volume at which they paid rent on a percentage of sales, which is a good criterion of success. Other merchants were reported to be doing a *fair* volume or *satisfactory* volume, but few had achieved their budgeted sales goals. This may or may not mean something, since we do not know how realistic the budgets were. One informed source estimated that the whole Square was operating at

a sales *rate* of about $10 to $12 million annually, which is probably far below the breakeven point. It was widely reported that the supermarket had not achieved a satisfactory volume. A few of the stores in the centre were not in operation at the opening, but by March almost all the available space was in use.

One argument that was commonly used to explain the lower sales volumes was that they were due to overall economic conditions. This is true only to a very limited extent as can be seen from Exhibit 4. If we can assume London retailing experience is roughly similar to the provincial experience, and this seems like a conservative assumption, only a very small portion of the sales decrease can be blamed on the overall economy. In other cases, sales increases or decreases were explained or excused by quite valid but unique situations, e.g., the variety store across the street was being remodelled, or the building next door burnt down. These factors were kept in mind in assessing the total effect on sales volume.

EXHIBIT 4

ONTARIO RETAIL TRADE INDEX[1]

Percentage change in Retail Sales by Month
1960 over 1959

	Sept. 1960	Oct. 1960	Nov. 1960	Dec. 1960	Jan. 1961
Department Store	— 2.1	+ 0.1	+1.3	+4.8	+0.8
Variety	+ 4.3	— 4.3	—0.7	+5.0	—0.6
Men's Clothing	+ 1.0	— 9.5	—9.0	—0.6	—11.5
Women's Clothing	+ 6.6	— 4.8	+1.2	—1.2	—1.7
Family Clothing	+ 6.0	— 4.0	+0.1	+7.3	—0.5
Furniture	—13.4	—10.8	+0.7	—3.5	—3.7

[1]Source: Dominion Bureau of Statistics Industry and Merchandising Division, Retail Trade.

ii) *Effect on Merchandise Carried.* Very few changes in merchandise carried were reported by the merchants inteviewed.

iii) *Effect on Pricing.* In general, the Downtown London and East London merchants reported taking lower markups and more frequent markdowns than prior to the opening of the Square. The extent of these pricing changes was quite variable.

Merchants operating stores in Wellington Square as well as in Downtown London or East London were taking identical markups in all outlets. This ties in with the researchers' opinions that prices in all three shopping areas were competitive on similar merchandise.

iv) *Effect on Advertising.* Generally, Downtown London and East London merchants maintained their advertising expenditures at the same level as before the opening of the Square. Some of the major Downtown merchants increased expenditures however, and some smaller firms actually reduced their expenditures, feeling that their advertising would not be noticed at the time of excitement about the Square.

Collective advertising and promotion done by the Downtown merchants was decreased because they were not felt necessary with the new drawing power of Wellington Square in play.

Newspaper advertising lineage in late 1960 was up 10% to 20% per month over 1959, despite increased rates. This can probably be attributed directly to Wellington Square. Furthermore, it was the opinion of newspaper sources that the quality of advertising copy had generally improved, with more aggressive appeals being used and more frequent copy changes.

v) *Effect on Store Personnel.* Because of the increased demand for sales clerks resulting from Wellington Square, many Downtown and East London merchants experienced losses in personnel. These merchants attributed the losses to the more attractive surroundings at the Square. They claimed that salary levels were competitive.

vi) *Effect on Services.* There were no notable widespread changes in services such as credit or delivery.

vii) *Effect on Store Hours.* Little change in store hours was experienced. In late April, 1961, the majority of Downtown and Wellington Square merchants announced they would be open two nights a week instead of one, but this was described as a competitive move against anticipated suburban competiton.

viii) *Effect on Suburban and Trading Area Developments.* Wellington Square seems to have been a patent failure in the role of discouraging the development of suburban shopping centres. The development of five community sized centres and one regional centre in suburban locations have been announced at various times after the opening of the Square. In addition, it was reported from reliable sources that two promotional department store chains (a sort of upgraded discount house) were on the point of announcing their intention to establish in suburban London. Of note too, is a major $5.5 million shopping centre being erected by the same developers in Kitchener, Ont., on the eastern fringe of the London trading area.

ix) *Effect on Real Estate.* Considerable activity has been noted in the improvement or expansion of premises by Downtown merchants. Woolworths Ltd. is completely rebuilding their downtown store, and Simpsons is adding 36,000 square feet of retailing space. Many store fronts have been renovated, new signs hung, and one store has made a major air-conditioning installation. In all, property has been upgraded. A good deal of this activity can probably be attributed to the advent of Wellington Square.

Real Estate sources indicate however, that there is little demand for new store sites in the downtown area. In addition, they claim that rents have not increased since Wellington Square.

The Effect on Trading Area Shoppers.

This section will be divided into a presentation of findings on (a) the geographical origin of shoppers and (b) the shopping habits of the shoppers in downtown London. In many places it will be a description of what is occurring now, rather than the changes that have occurred, because suitable measures prior to the advent of the Square are lacking.

i) *Geographical Origin of Shoppers.* Research findings essentially substantiate the boundaries of the trading area as predicted on Exhibit 1. Some penetration outside those boundaries has also been experienced with significant sales to customers from Sarnia, Kitchener, Windsor, and even Hamilton.

Unfortunately, there is little numerical evidence as yet available regarding the percent penetration of the various zones in the trading area or the change in penetration that could be attributed to Wellington Square. The predominant opinion of most Downtown and Wellington Square merchants is that out-of-town business has significantly increased.

ii) *Shopping Habits.* Results from the shopper survey indicate that there was no significant change in the frequency of visits to the Central Business District.

About 95% of the shoppers interviewed estimated that they were spending about the same amount per week in the Central Business District as before the opening of the Square. Most of the remainder indicated they were spending less.

There was strong evidence that the majority of shoppers visit both the Wellington Square stores and the Downtown merchants' stores on any particular shopping trip. Some 69% indicated they visited both areas, 13% indicated they visited the Square only, and 18% indicated they visited the downtown area only.

About 65% of the shoppers indicated that they walked between Simpsons and Wellington Square (and vice-versa) via Dundas and Clarence Streets with most of the remainder following the Richmond and King Street route. A few followed the Dundas and Wellington route. Traffic counts indicated a large increase in both vehicular and pedestrian traffic in the vicinity of the Square. Technically, the 'centre of gravity' of the downtown area seems to have shifted from the Dundas-Richmond intersection to somewhere between there and Wellington Square. These traffic patterns have sharp implications for merchants on the western fringe of the shopping area and also those on Dundas between Clarence and Wellington.

THE OUTLOOK FOR THE FUTURE

Almost as one, the Central Business District merchants we interviewed expressed the conviction that "all will be well in the future." Is this just wishful thinking? Will the overcapacity problem be solved with time? If so, how much time? Or will the situation deteriorate as new suburban and trading area shopping centres are erected? Certainly this assumption merits investigation.

In what follows, there will be no attempt to come up with precise predictions of future conditions; such a task would require a major research job. Rather, some general considerations of the major factors influencing the future of the central business district will be presented, with the hope that they will not only clarify the dangers involved in the previous assumption, but also provide the basis for some tentative conclusions.

The future sales of the central business district will be a function of: (1) the total retail potential (or sales) in the trading area and (2) the share of that potential which the Central Business District merchants can obtain in competition with other retailing areas.

Total Potential. The total potential for the London trading area at present was outlined previously. In the long run, growth of this total potential will ease the problem of overcapacity in the central business district, *provided the share of that potential presently being obtained is maintained or increased.* Such growth in potential, however, depends primarily on population growth, and in this sense the build-up in business will be painfully slow for most merchants—perhaps only solving the overcapacity problem in 10 years. And again, any improvement is contingent on the ability of the Central Business District merchants to maintain or increase their share of the trading area business.

Share of Potential. What is perhaps the most crucial problem revolves around what share of potential will be realized by the central business district in the future. Will this share increase? Will it be stabilized by the siphoning off of sales to new shopping developments? Worse still, will the new shopping developments cut into the share of potential presently enjoyed by Central Business District merchants?

The issue seems to centre on the competitive ability of the whole central business district in relation to other shopping developments in the trading area. And the situation is made particularly urgent by the present retailing overcapacity in downtown London. Any loss in sales volume would be critical.

In a book entitled *The Shopping Centre versus Downtown,* C. T. Jonassen makes some comments and

gives some research findings which will perhaps guide our consideration:[7]

> "The consumer himself is the final arbiter of the fortunes of the central business district and the suburban shopping centers, and he therefore holds the secret of their fate. It is the customer who weighs the advantages and disadvantages of shopping areas in terms of what he can get for what he has to pay in cost, time, and energy, and it is only through his eyes that such physical conditions as parking, traffic, and crowding become meaningful motivational factors. Thus the consumer's market behavior is essentially a compromise adaption to attracting and repelling forces evaluated within the framework of his attitudes and values.
>
> . . . The study next investigated the weight of various factors and found in all three cities[8] that the most important disadvantage of the central business district was difficult parking; next in importance for all cities was "too crowded"; and third, traffic congestion. Respondents from all three cities agreed that the *advantages* of downtown shopping were, in order of their importance: first, "large selection of goods"; second, "can do several errands at one time"; and third, "cheaper prices." Opinions concerning suburban shopping centers were less uniform in second and third choices, but respondents in the three cities agreed that closeness to home was the chief attraction. Similarly, the three cities named the same *disadvantages* of the suburban shopping centers in the same order, with "lack of selection" first, "not all kinds of business represented" in second place, and "prices too high" in third position, demonstrating a remarkably consistent pattern."

Let us consider these various factors that are influential in London in the consumer's decision regarding *where* to shop.

i) *Selection of Goods.* Without question the downtown London area offers the most complete selection and assortment of goods and services for a radius of 100 miles. However, significant competition will be met soon from the Kitchener-Waterloo area, whose trading area overlaps the eastern section of London's trading area and where a new $5.5 million shopping centre is soon to open. In addition, the proposed new regional center outside London and the proposed promotional department stores will pose new competition in this respect. One might also expect that many of the retailers in the small cities like St. Thomas will sharpen their merchandising if they start to suffer significant losses. Nevertheless, the advantage in this respect seems to lie with downtown London.

ii) *Prices.* Although they may fight hard with promotional specials and deals, the days of the downtown London merchants as price leaders are probably numbered. Into the gap will step the two promotional departmental stores that are now considering suburban locations in London.

A particular threat that the promotional department stores may hold for the Central Business District merchants lies in their tendency to select the fastest turning merchandise and price it very low. Thus, if the Central Business District merchant meets the promotional department store prices, he may not get the margin he needs on these fast turning goods to support the broad selection of goods, which represents his real strength. On the other hand, if he does not meet the prices, his sales volume may suffer such that his net result is the same. This problem has occurred and has been handled before in many cities, of course, but perhaps none with the unique situation of overcapacity that characterizes London.

iiil *Parking.* The parking problem in downtown London is not now acute, with ample off-street parking available at reasonable prices.

iv) *Crowding and Traffic Congestion.* Crowding does not seem to be a difficult problem in downtown London; traffic congestion is quite bad during the rush hours, but steps in traffic regulation are being taken to alleviate this situation.

v) *Closeness to Home.* With a rather widespread trading area the Central Business District merchants are at a distinct disadvantage in this respect.

These then are the factors that must be weighed in forecasting the future share of potential for downtown London: new suburban and trading area shopping developments, an advantage in selection, a probable balance or disadvantage with competitive areas in respect to prices, parking, traffic congestion, and a disadvantage in terms of distance from home.

CONCLUSION

This paper has presented an account of the significant events preceding and following the opening of Wellington Square. The reader can draw his own conclusions from this evidence.

Personally, I think that in retrospect one might ask some pointed questions about the wisdom of adding *so much high-cost* retailing capacity to a downtown area at this time of predominant trends in retailing to suburban shopping and discount merchandising. As for the future, it looks as if most Central Business District merchants are in for some lean years, particularly if the proposed suburban developments go ahead as scheduled.

[7] *The Shopping Center versus Downtown* by C. T. Jonassen, Ohio State University, Columbus, Ohio, 1955.

[8] The cities were Columbus, Ohio; Seattle, Washington; and Houston, Texas.

Energy Concepts and Management Theory

What are the various kinds of energies in business activities? The author suggests that clearer understanding of energy concepts may help advance the development of theory in the analysis of certain broad management problems.

H. J. Barrington Nevitt

During the meeting of November 12, 1960, at Spot-On-Seven, Georgetown, Ontario, to discuss Clare Fraser's picture language system, the question arose of what we meant by *energy* in relation to the managing process and business operations.[1]

If we trace the steps for implementation of a typical objective such as the design, manufacture, and marketing of a new product, with the aid of Clare Fraser's Hub Chart: from mobilization of existing sciences and arts, to organization of people and things and their co-ordination within our company, to the resulting decisions affecting external publics who participate in achieving our purpose, we observe varying degrees and types of energy released at definite stages in this chain of events.

Our purpose in this article is to point out the multiplicity of energies involved in business activities; to note some of their relationships and similarities, while stressing their qualitative distinctions at each level of physical, chemical, biological, and human social organization; to illustrate more complex energy manifestations by analogies with simpler forms of energy, while indicating the limitations of such parallels; and to demonstrate the importance of recognizing the principal energy types in order to avoid fallacious thinking in the analysis of certain broad management problems.

ENERGY IN BUSINESS—AN ANALOGY

Business executives with scientific training are apt to draw parallels from their earlier fields of specialization in solving management problems. At one time or another perhaps most of us attempt to describe complex phenomena in terms of simple mechanical analogies. But such illustrations, derived from the exact sciences, are valuable only insofar as we recognize their limitations.

[1]See "A Map-Language for Managing" by Clare Fraser, *The Business Quarterly,* Vol. XXV (Winter, 1960), pp. 211-215.

The idea of energy as applied in the Hub Chart is typical. Here we may think of the sciences and arts as historical accumulations of *potential energy* that can be transformed into *kinetic energy* through organized work. The leader who initiates the co-operative action necessary to attain our goal first applies his own triggering energy, by effective communications, in the manner and of the amount needed to break down the threshold of inertia he encounters, and he thereby liberates the energies of those who join their efforts with his.

Repetition of this process engenders a chain reaction of energy releases, with occasional energy feedback to readjust their flow, corresponding to changes in tactics, policies, or methods resulting from upward communications, at the divisional, departmental, and lower echelons. Nevertheless, at each stage the individual and co-operative energy contributions of manager and managed, staff and line, group and sub-group, are qualitatively and quantitively different from the purely mechanical or physical energy implied by our analogy, which fails to reflect these subtleties.

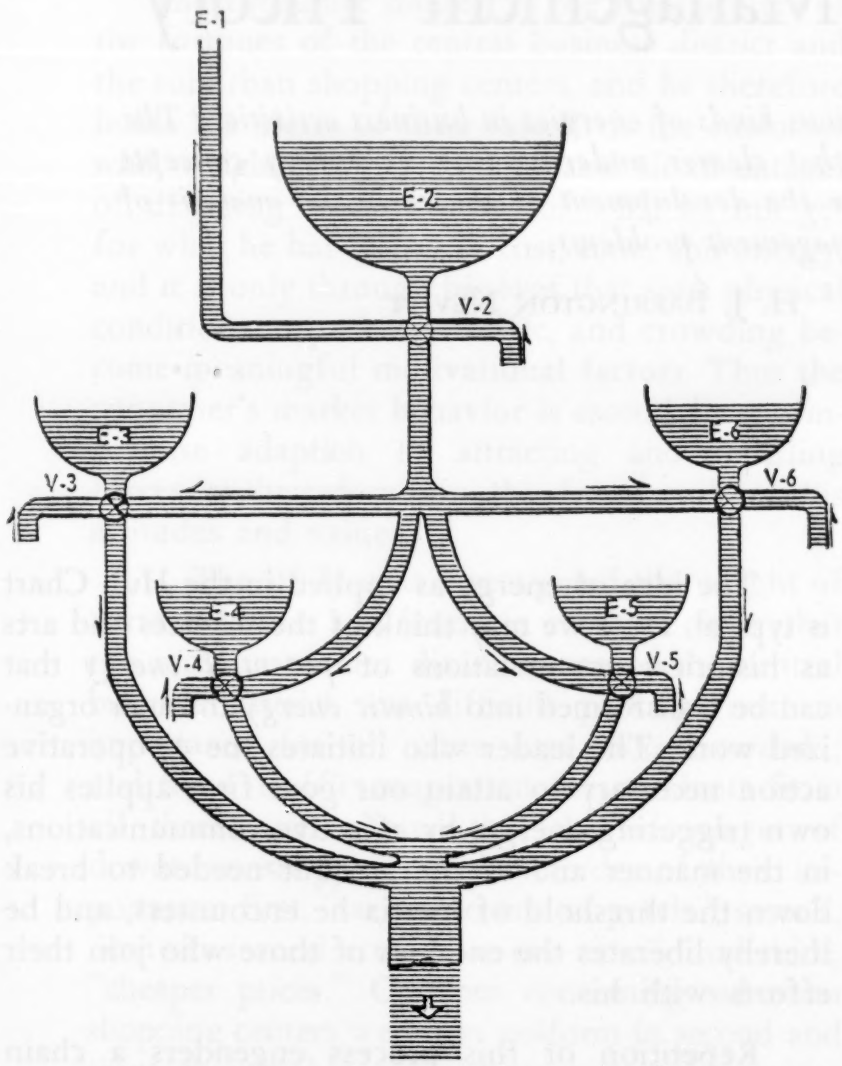
ENERGY TRANSFORMATIONS IN MANAGEMENT

A higher degree of organizational complexity may be compared to chemically interacting fluids that combine to form a desired compound, as suggested by Figure 1. Here gravitational and chemical energies represent counterparts in the managing process.

Let us suppose the liquid, embodying chemical energy E-1 and flowing downward from a higher reservoir represents, for example, the energy of our industrial product designer. If we further assume that a certain weight of liquid must accumulate in order to open valve V-2, this weight, or gravitational energy, roughly corresponds to the amount of *communication* energy required for the designer to gain higher management support and thereby trigger release

FIGURE 1

Chemically Interacting Fluids Analogy of Managing Process



Total E=(Sum of E-1 to E-6) + (Emergents from Interactions)

of additional, and qualitatively different, chemical energy E-2.

Now, if these dissimilar fluids containing E-1 and E-2 unite to create a new liquid, their *interaction* energy represents the *team* energy, over and above the individual energies of designer and higher management that are generated when their efforts are organized and directed toward a common aim. If the downward stream now swells until its weight causes valves V-3, V-4, V-5, and V-6 to open, we may again draw a parallel to this in the managing process. Effective communications set free the characteristic energies of draughtsmen, engineers, accounting and sales personnel, which are analagous to the pent-up chemical energies, E-3 through E-6, plus the new energy resulting from their combination and organization.

In the preceding analogy of step-by-step energy releases and conversions, we observe not only the rapid expansion in total volume of energy, the emergence of qualitatively different energies. In a restricted sense, to be explained later, we may even refer to a sum total of these energies. Such correspond to energies of divisions, departments, and other company organizational groupings, as well as separate individuals, when engaged in co-operative endeavour.

Although this representation suffers from the defects common to all analogies, it may, nevertheless, help us to visualize more adequately than our previous mechanical model the flow and the energy transformations that occur in the managing process, elucidated by Clare Fraser's Hub Chart. However, it adds little to our knowledge of the various energies involved. How then may we describe and measure the differing and more complex energies? How are they related to each other? How do they interact? What do they have in common?

WHAT ARE THESE ENERGIES?

In attempting to be more specific, let us consider a few of the simpler forms of energy listed on Table 1, whence the more complex are derived, and indicate their hierarchial relationships. The chief types met in business are the physical (including mechanical, thermal, electrical, nuclear, etc.) chemical, vital psychological, and social. This rough classification will suffice to demonstrate the underlying principles of energy analysis as applied to management. Further study of cited references will soon disclose, however, that here we are exploring the borderlines of knowledge, where the searcher will probably find more questions than answers.

MECHANICAL, CHEMICAL AND NUCLEAR ENERGIES

Most familiar and thoroughly understood is the *mechanical energy* of terrestrial and celestial bodies, of billiard balls and stars, treated by classical Newtonian mechanics. Some investigators have gone so far, indeed, as to reduce all forms of energy to this mechanical type! Such mechanical energy or work (E), which may be partly available as *kinetic* or stored as *potential energy,* is perhaps most aptly demonstrated by the pendulum. At the limit of the pendulum's oscillation, when instantaneously at rest, its total energy is potential. When passing through the point of equilibrium at the bottom of its swing, the total energy becomes kinetic, since gravity acts immediately thereafter to diminish its upward motion. At intermediate positions therefore: The total energy equals the kinetic energy plus the potential energy. Appendix 1 indicates how the mechanical energy concept is derived from basic physical ideas of mass, distance, and time.

How far does the mechanical energy concept remain valid as we penetrate more deeply into the structure of matter, where tangible or visible objects become assemblages of intangible or invisible molecules and atoms, or a growing array of elementary particles? Here we encounter more subtle energy forms that may no longer be directly available for work. However, their common basis and the ultimate

TABLE ONE*

Natural Phenomena	Associated Energies	Derived Sciences
Human-beings-in action	Social	Social sciences and arts
Conscious living organisms	Mental	Psychology
Animals and plants	Vital	Biology
Terrestrial and celestial objects	Chemical Mechanical	Chemistry Classical mechanics
Molecules, atoms and "fundamental particles"	Nuclear	Nuclear physics
Radiation and "ether"	Quantum	Quantum mechanics

possibility of their conversion into one another is implied in the universal Principle of Energy Conservation.

Historically J. P. Joule was the first to establish this principle by demonstrating the Mechanical Equivalent of Heat: that quantity of mechanical energy which, if entirely converted into heat, is capable of raising the temperature of unit mass by unit degree. It was Lord Kelvin who introduced the Absolute Scale to measure this quantatively different form and J. C. Maxwell who demonstrated the statistical nature of molecular motion for which temperature was the directly observed manifestation.

Is was also Maxwell who developed the concepts of *electro-magnetic energy* discovered by Faraday and Max Planck who explained their peculiar distribution in black-body radiation by postulating emission in packages or quanta, as individual photons. Appendix 2 touches upon the nature of radiant energies and ether-space.

Above we have mentioned some of the more common transformations of energy in the realm of physics and their qualitatively distinctive manifestations. Everywhere energy is thus revealed as the movement or activity of something that changes in appearance and behaviour, gradually or rapidly, through endless evolution. But physical ideas alone are quite inadequate to describe the inexhaustible diversity of natural phenomena.

VITAL, MENTAL, AND SOCIAL ENERGIES

As we ascend the scale of organizational complexity, where our knowledge soon becomes less exact, we initially encounter the *chemical energies* of explosion or slower combustion, due to the rearrangement of molecules and atoms. Next we find animate emerging from inanimate bodies with characteristic *vital energies;* then consciousness arising, as central nervous systems develop, with associated *mental energies.* These complex processes are by no means completely understood. Finally, we reach the immense variety of *social energies* observable in organized human activites.

LIMITS OF ENERGY DEFINITION AND MEASUREMENT

Moreover, each energy concept may be further subdivided into minor categories and defined more explicitly so as to reflect subtleties of the observed phenomena, while every successive energy level in this hierarchy includes those preceding it. Such a classification, shown in Table 1, though roughly outlining the relationship of the principal energies encountered in business operations, barely suggests the illimitable wealth of forms revealed by nature.

As complexity of organization increases, the exactitude of energy measurement diminishes. We must then rely more heavily upon judgment and experience,

*NOTES

1. *Natural phenomena interact, overlap, and continually develop to produce new manifestations and possibilities of further evolution with more complex syntheses, at definite, organizational stages.*
2. *Energies of various kinds are revealed in the essentially active and dynamic aspects of evolving processes but they may also exist in potential or relatively static forms.*
3. *Sciences are abstract generalizations, reflecting behaviour of observed phenomena, continually revised to incorporate new experience.*
4. *In growth, as opposed to decay, more complex phenomena and their derived concepts subsume or contain, and do not entirely replace or nulify, the less complex.*
5. *Italics are used throughout this paper to denote relatively indefinite or undefined abstractions.*

or estimates of limited scope, than upon universally accepted standards: more upon arts than sciences. Once again we approach the frontiers of existing knowledge.

If we accept the above point of view, we must never expect to reach final and complete definition of any particular energy, nor to describe it exhaustively in terms of simpler constituents. Still less may we admit reduction of higher forms to bare mechanical energy. While avoiding these fallacies neither may we elevate energies to absolutes, nor to empty abstractions, nor to rigid formulas into which all data must neatly fit. But how fruitful are such complex and illusive ideas for practical management?

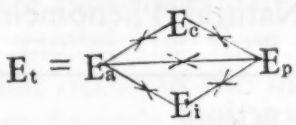
USE OF ENERGY CONCEPTS IN BUSINESS

In this article we are not concerned with exact measurement or calculation of mechanical, thermal, electrical, nuclear, and other types of energy, nor with their laws of transformation, which are adequately treated in current technical literature. Our interest centers rather upon the use and misuse of energy concepts, as they apply to the qualitative analysis of complex business situations where precise information is lacking. How far may we validly employ physical or chemical models and where must we exercise caution to avoid fallacious thinking? The following are typical examples:

(1) Let us again consider the managing process in our hypothetical company with the aid of Clare Fraser's Hub Chart. Here the total energy released in achieving our desired objective is a complex aggregate of social energies characterizing divisional, departmental, and individual activities, with their associated mental, vital, and other energy components, including the distinctive contributions emerging from their unity, operating on and interacting with the chemical, mechanical, and nuclear energies of raw materials and physical plant. Outside, we also have the energies of our various publics and of the total political, economic, and historical environment at a given time and place.

All these interconnected and evolving energies are embodied, in greater or less degree, in the ultimate product or attained objective. We are, therefore, no more justified in trying to express the total dynamic aspects of this complex process in terms of mere collection or arithmetic sum of mechanical energy equivalents than we would be to add the numbers of men and machines to the number of materials involved! Nevertheless, physical or chemical analogies may simplify the analysis of certain stages of the process, if their limitations are fully appreciated.

(2) At any given level of organization, total energy of one specific kind may be represented as:



E_t = total energy of a definite type;

E_a = active, kinetic, dynamic energy of the same kind immediately available;

E_p = passive, static energy of that type potentially available;

E_c = energy wholly converted to or from this variety to or from other levels, gained or lost in process;

E_i = energy of interchange with other levels, in process, such as catalysis.

Arrowheads indicate how these forms may continually alternate from passive to active and lead to or borrow from other interconnected sources of different energies.

(3) Formulation, development, and application of general principles, reflecting observations of energy behaviour at various organizational levels, are functions of the sciences, as indicated in Table 1. Since the Principle of Energy Conservation, which is valid for every process as a whole, applies only to those mechanical aspects of energy ultimtely reducible to expressions of particle masses and velocities, it is in this narrowly restricted sense that our equation, shown in Figure 1, is true for chemically interacting fluids. However, no principle of conservation exists for energy qualities or forms and their manifestations that, on the contrary, are continually changing in amounts and transforming from one kind or level to another, while ceaselessly growing or decaying. Discovery of still more general patterns, common modes of behaviour and their underlying realities is the task of philosophy.

(4) It is therefore, just as erroneous to compare the energies of machines and operators as to compare the energies of apples and elephants. But the energy of one machine-operator combination may readily be measured in terms of another, so far as their performance in a specific industrial process is concerned.

It is likewise improper to compare the energy of an executive at one level of organization with that of an executive at another level, since each acts in qualitatively different ambients. Similarly deceptive are the common metaphors likening nations or corporations to individuals, the whole to its parts. Each has a different energy content, its own characteristic behaviour pattern, which must be determined by careful analysis. Correct appreciation and recognition

of energy types will, therefore, help us to avoid pitfalls of over-simplification, ignoring essential differences, or attempting to measure unlike energies in terms of each other.

(5) Abraham Maslow has already pointed out the prerequisites for maximum individual, social energy release, under varying degrees of satisfying basic personal needs, ranging from the physiological and safety, through those for social and self-esteem, to reputation and self-fulfillment. "A satisfied need is not a motivator of behaviour!"[3]

(6) We also have the entire spectrum of group social energy releases, from the complete disharmony of conflict or warfare, through intermediate stages of mutual restraint or containment, to compromise based on greater or less balance of power, to collaboration, and finally to the harmony of mutual affection or the ultimate of love, with their distortions and variations depending upon the numbers and kinds of people involved.

(7) In a manufacturing plant we convert purchased kinetic and potential energies embodied in materials, services, and abilities of various kinds, into saleable products containing their combinations, transformations, and emergents. The effectiveness of our business operation may be judged, at convenient stages, by estimating what portion of each energy type available at that stage, whether kinetic or potential, is actually utilized.

While engineering estimates may be relatively easy for energies up to the chemical level, shown on Table I, such is no longer true for those beyond. To the extent that we are unable to measure the vital, mental, and social energies, we are also clearly unable to determine how far their potentialities are used in a manufacturing process. Moreover, the characteristic energies of separte stages cannot be summed to yield a meaningful grand total, except in the broadest terms of some common denominator abstracted from the entire process.

It is with these essentially different energies, above the chemical, that we are chiefly concerned in determining the specific role and techniques of management, suitable for each organization level and kind of energy. Here art and judgment, rather than science and measurement, are paramount. Nevertheless, the final arbiter of total management performance is still the market. For by statistically comparing the products, or energy-embodiments, of one manufacturing process with another, in terms of its own constantly evolving, abstract, common denominator of energies, the market ultimately determines which producers have embodied the total available energies most effectively in their own business operations.

[3]"The Human Side of Enterprise" by Douglas M. McGregor from the *Proceedings of the Fifth Anniversary Convocation of the School of Industrial Mangement*, M.I.T.,Cambridge, 1957.

CONCLUSIONS

The foregoing proposes a novel role for energy concepts in the analysis of business operations; stresses the qualitative distinctions and diversity of energy forms, while indicating their essential unity and hierarchial relationship; points out the uses and limitations of simpler physical and chemical models for representing more complex vital, mental, and social energy manifestations; touches upon the significance and possibilities of measuring and comparing various energy types; and indicates the boundaries of present knowledge regarding energy transformations and evolution.

When organizing material and human resources to achieve a given objective, with the least expenditure of money, time, and effort, management depend chiefly upon technical specialists for most economical use of the energies dealt with by physics, chemistry, and biology. But, where sciences are embryonic or as yet unborn, management turn to the *arts* of their profession, to qualitative analysis and to rough estimates and analogies. It is here, and in fresh situations, where past experience may no longer prove valid, that correct understanding of the energies involved will ultimately permit maximum realization of their potential contributions.

APPENDIX I

To gain a clearer insight we may obtain a general expression for mechanical energy in terms of the fundamental concepts: Mass (M) or quantity of ordinary matter; length (L) or distance referred to a convenient standard; and time (T) measured by some agreed upon, naturally occurring, regular, periodic motion. We may then express velocity (V) as distance travelled in a given time: $V=L/T$ and acceleration (A) as change in velocity during a certain period: $A=V/T=L/T^2$ leading to the Newtonian definition of force (F) equivalent to accelerated mass: $F=MA=ML/T^2$ whence, finally, the notion of mechanical work or energy (E) as the exertion of force over a distance: $E=FL=ML^2/T^2=MV^2$ and, to complete the picture, we have power (P) as the rate of work or energy expenditure: $P=E/T=ML^2/T^3$.

Furthermore, since velocity is essentially relative to some frame of reference, consisting of definite physical bodies, mechanical energy is likewise relative only to those same bodies and has no separate, absolute existence.

For monochromatic light of vibration frequency (F), energy is radiate at the velocity of light in multiples of its smallest observable unit, the *quantum*: E=hF, where Planck's constant (h) governs the quantitative relationship of this qualitatively distinctive *electro-magnetic* or *radiant energy* at the elementary particle level of physical organization.

Penetrating still deeper we encounter the not-so-empty vacuum of ether-space, which sustains propagation of complex and interfering electro-magnetic waves at the constant speed of light (C), postulated as the maximum velocity of signal transmission attainable throughout the Universe by Einstein's Special Theory of Relativity. Einstein has also demonstrated the possibility of transforming radiant energy into mass and vice versa, in his now famous expression: $E=MC^2$. But most physicists would probably deny any reality to an underlying, dynamic, sub-atomic, wave-propagating ether-space pervading this vacuum, whence all other forms of energy might conceivably originate through transformations and continually evolving syntheses. Here we are speculating beyond the limits of present knowledge.

SPOTLIGHT ON CANADA

STOCK-TAKING has become the chief preoccupation of Canadians in 1960. It is becoming increasingly evident to thoughtful observers that some adjustments are going to have to be made in the post-war estimation of Canada's position in the economic and trade world.

One instance of this is that the pointing of the richly coloured picture of Canada as a booming country of unlimited opportunity and rapid expansion, which, since the war, has been allowed to be encouraged, will have to be toned down to agree with reality.

Since 1950, in most respects Canada has not grown as rapidly as several other countries. Its population, indeed, increased by 27% as compared to the United States 17%, the Netherlands 12%, Japan 12%, and West Germany 11%. But this exceptionally high growth, due partly to a strong flow of immigration, has not been matched by a similarly high rate of economic growth, as the following table, published in the annual report of the Bank for International Settlements, indicates.

	Gross National Product Percentage rate of annaul increase in real terms.		Gross Domestic Investment Investment as percentage of Gross National Product	
	Average 1951-8 %	1959 %	Average 1950-8 %	1959 %
CANADA	4.6	3.5	19.2	18.5
FRANCE	4.4	2.1	18.3	18.6
WEST GERMANY	7.5	5.7	23.2	24.0
ITALY	5.6	6.6	20.6	21.3
JAPAN	7.6	13.0	27.8	30.0
NETHERLANDS	4.6	5.2	23.9	24.5
UNITED KINGDOM	2.1	3.2	15.2	16.7
UNITED STATES	2.9	6.8	17.5	17.9

While allowance must be made for the fact that the European countries and Japan had to start from a state of war devastation and dislocation, much ground in this respect had been regained by 1950-51.

According to the report, the high rate of economic expansion in recent years, in Germany and in Japan in particular, has been achieved mainly because there have been massive transfers of manpower to the manufacturing sector. Employment in this sector increased by about 50% between 1950 and 1959 in both Germany, Japan, and by 20% in Italy. The comparable figure for Canada is 10%, over a period during which the total Canadian labour force increased by 20%. The truth is that although Canada since the war has developed its economy steadily with the main emphasis on production of raw materials and semi-processed goods, no spectacular expansion has actually occurred. Since the 1958 recession, plant efficiency has been improved and many companies have worked themselves into stronger financial positions. The long range prospect points therefore to a continued normal healthy expansion ahead, but this does not justify the type of glowing report that has been all too prevalent.

—The Merchantile Bank of Canada

The Process of Hiring

The employee's attitude towards his work begins to develop at the time of hiring. Mr. Mikalachki considers that more attention should be paid to the hiring process itself.

ALEXANDER MIKALACHKI

The turnover and unrest of personnel in many organizations has been attributed to a number of variables including pay, working conditions, personal relationships with the boss and fellow workers, home problems, and the like. One important variable that is omitted in this list and that is not extensively referred to as a cause of turnover and unrest is the hiring process. The effectiveness of this process has been accepted without serious question by the administrator. Since the hiring process is a critical one in determining the relationship an employee has with his work, it would not appear advisable to accept the efficacy of this process unquestioningly.

At the time of being hired and placed on the job, the employee's attitude towards his work begins to develop. His initial attitude will have an effect on how the employee continues to perceive the organization. Support of this statement can be found in the voluminous literature on resistance to change. To state it succinctly, once an attitude is formed, the employee will tend to see only the phenomena supporting that attitude. It is the purpose of this article to investigate some prevalent ideas concerning hiring and to delineate a more effective scheme for obtaining personnel. More effective, in this case, would mean less turnover and unrest and greater compatibility between the man and his job.

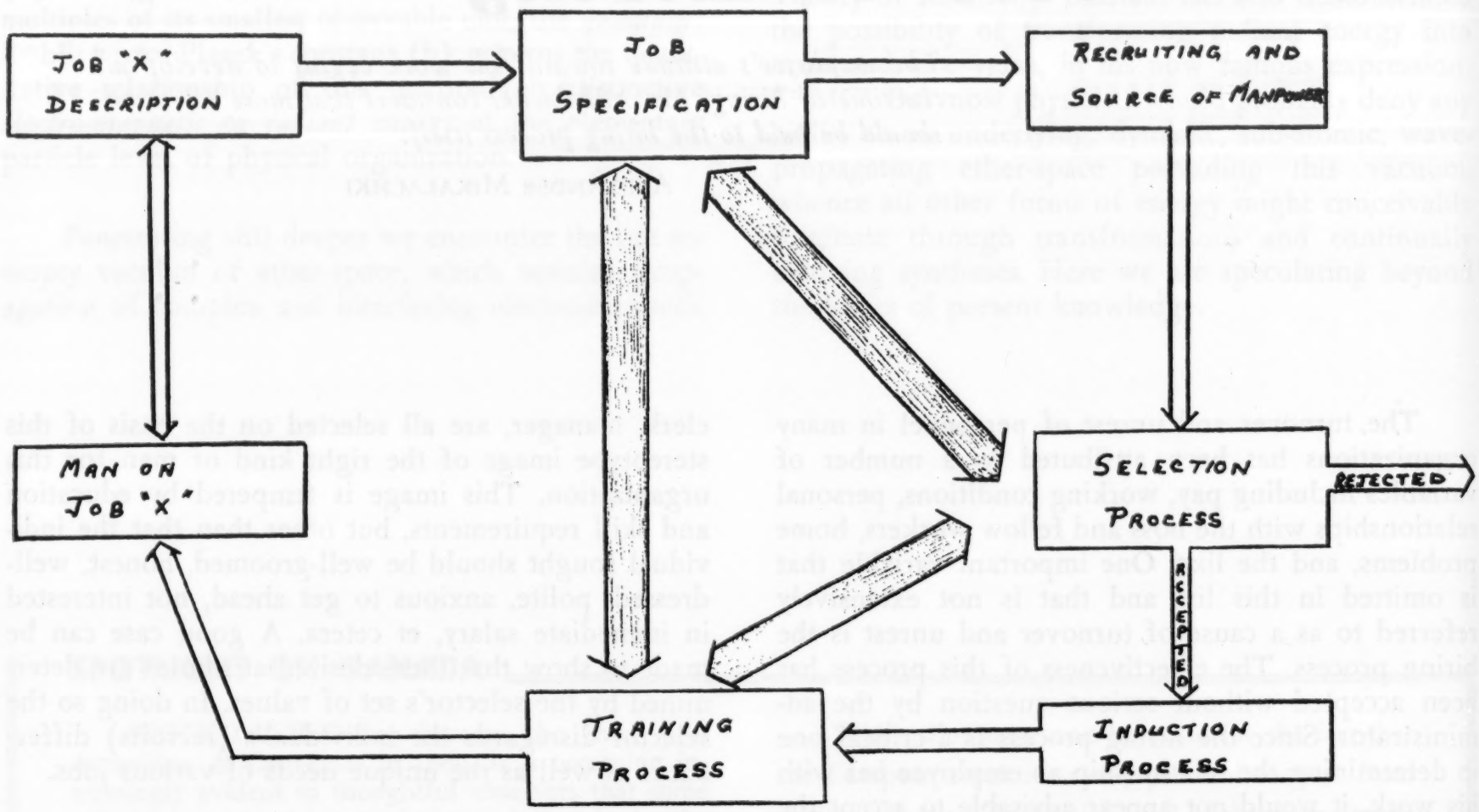
What prevalent ideas *vis-à-vis* hiring contribute to ineffective administration of personnel? One answer to this question lies in the compartmentalized manner in which various concepts such as training, selection, and job specification are handled in the process of obtaining personnel. Both literature and practice are consistent in ignoring the interdependence of these concepts. The literature has a tendency to deal with these concepts independently. This also occurs in practice. The individual performing the selection may over-emphasize the selection concept by maintaining the same image of a desirable employee for every job. The floorsweeper, foreman, clerk, manager, are all selected on the basis of this stereotype image of the right kind of man for this organization. This image is tempered by education and skill requirements, but other than that the individual sought should be well-groomed, honest, well-dressed, polite, anxious to get ahead, not interested in immediate salary, et cetera. A good case can be made to show that these desired attributes are determined by the selector's set of values. In doing so the selector disregards the individual's (recruits) differences as well as the unique needs of various jobs.

Another example of the myopic, overemphasis of one concept would be any rigid, predetermined program that disregards the individual's needs. The high turnover of graduates whose first few months are spent in a training program could be attributed to the fact that most programs offered them do not take into account their previous training and unique needs. Rather than devise a program in collaboration with participant recruits, program directors make the assumption that they know what is best for the recruit. Therefore, if introductory training is implemented, then some concern must be shown as to where it fits into the living process and to whose needs it is directed.

The above examples are illustrative of a hiring scheme that deals with its component concepts in a separate, independent manner. This scheme contributes to turnover and unrest of personnel because the utilization of any concept in a discrete manner is inconsistent with the goal of obtaining the optimum compatibility between the man and his job. That is to say, the understanding of any or all the concepts pertaining to the employing of individuals is in itself not sufficient for effective administration. It is the awareness of the critical relationship of these concepts to each other than makes for effectivness. Consequently, the remainder of this article will be devoted to the illustration and elaboration of the place of each of the hiring concepts in relation to the total

FIGURE I.

A CONCEPTUAL SCHEME FOR EXPLAINING THE PROCESS OF HIRING



process. The intention here will be to illustrate, verbally and diagrammatically, a conceptual scheme of the critical interdependence of these well-known concepts, rather than to introduce some new concepts.

A CONCEPTUAL SCHEME FOR HIRING

A scheme that is addressed to the dynamic nature obtaining personnel is shown in figure 1. First, a clarification of these concepts and some discussion of their general relationship to each other is to be undertaken. Second, the consideration of the crucial interdependence of three concepts is to be elaborated on in greater detail.

The conceptual scheme in question has certain characteristics which deserve attention. The concepts are related in a form that has no beginning or ending but is circular. Unbalanced attention to any one concept will affect the others; thus, the previous quarrel with the administrators who focus on a single, discrete concept for purposes of hiring. The consequence of disregarding the *dynamics* of hiring would be disparity between the man and his job.

To elaborate upon this scheme an arbitrary starting point is necessary. Let us start at a description of job X and then move clockwise around to "man on job X." The job X description, as the name implies, describes the job, particularly the nature of the job, and the employee attribute that would best suit the job. The information included in this description is job title, duties, skill, education, training, and working conditions. This information is primarily the source of data pertinent to job evaluation, hiring (job specification), and personnel rating. The need to describe carefully the job for which an individual is being sought cannot be overemphasized. To hire an employee without knowing the desired attributes of the job he will perform is pure folly.

A consequence of relating job requirements to personal attributes is the job specification. It is derived from the job description and is essentially a summary of the personal attributes required to perform a job satisfactorily. Generally it includes a job summary, education, experience, skill, physical, and personal (sex, age, marital status, character) requirements.

The relationship of job specification and source of manpower is specified by the recruiter and is tempered by company policy. The recruiter is the person who decides where and how to look for prospective candidates. An effective decision depends on the recruiter's understanding of the requirements of the job (job specification), together with his knowledge of where the individual possessing these attributes might be located. This is an important relationship, since if the *right* people are not contacted

and channeled towards the organization, then *ipso facto* a selection process of superior quality is rendered futile. One cannot obtain orange juice by squeezing apples, no matter how well one squeezes. Thus it can be seen that it is by virtue of recruiting that prospective employees are channeled into the selection *funnel.*

Selection becomes the moment of truth for the recruit and the company. The salient question at this stage is: "Which recruit is best suited for the job X"? In general the tools used to acquire data pertinent to this question include application forms, interviews, tests, and physical examinations. The selection process should facilitate a bilateral exchange of information between the applicant and the organization's representative.

Induction acts as the pivot between selection and membership and includes any activity which fosters the integration of the employee in the organization. The function of this concept is to bridge the gap between selection and placement of the employee. The importance of this concept was touched on earlier during the consideration of how the employee's attitude toward the organization is affected by his initial impressions. Often induction and training, both of which introduce the new employee to his fellow workers and job, are not observably separable and are carried out simultaneously.

The training discussed here is designed for a specific job, as contrasted to management development, which is concerned with the enchancement of the employee's potential. From a territorial point of view, training can take place on the job, off the job, or a combination of both. There are situations where formal training, or for that matter an induction program, is not established. Under these circumstances, it should not be assumed that there is no training or induction going on, but rather that it is not formally administered by management.

Either following, or coincident with, the training program the man is placed on job X. The circular process of hiring does not end here, since by definition there is no end to this process. The man on job X with his own peculiar attributes, capacities, and behaviour will affect and change job X. These changes in time will accumulate to the point where a new description for job X is warranted.[1] Thus the chain reaction through the entire process will take place until a state nearing equilibrium is reached.

The essential function of the hiring process is to secure and maintain the optimum compatibility between job X and the man on job X. With this goal in mind it has been shown how the concepts of figure 1 relate to one another. It should be obvious, at this point, that neglect of any one of these concepts would lead to an inefficient administration of personnel. However, notwithstanding the importance of the relationships of all the concepts in the scheme, there are three concepts whose interdependendce become crucial to obtaining the desired compatibility of man to job. These three are job specification, selection, and training.

[1]This point is specifically dealt with by J. A. Sarjeant, "The Dynamic Nature of Job Content," *The Business Quarterly,* Vol XXV (Fall, 1960), pp. 157-160.

THE CRUCIAL INTERDEPENDENCE

The emphasis will now shift to the interdependence of these three concepts. The focus is to be on *process,* in contrast to discrete concepts; that is to say, it is the *interdependence* of the concepts which gives them importance. For example, the ideal would be to select the individual possessing the required basic attributes for the job, subject him to the specified traning program and obtain a high compatibility between man and job. However, this is too idealistic for numerous reasons, one of which involves imperfections in training and selection methods. It would be in order, at this point, to elaborate on this crucial interdependence which is described by the heavy, double-headed arrows in figure 1.

JOB SPECIFICATION

As stated earlier, the job specification defines what attributes are required of an individual in addition to the specified training program necessary for the job to be satisfactorily filled. Therefore, by definition and purpose, the job specification affects who shall be selected and what training he shall be given. On the other hand, the job specification is derived from the job description, which in turn is derived from the observations made of an individual performing the job. The basic personal attributes the individual possesses affects his being selected in the first place, and are enhanced through training (formal and/or informal). *This analysis indicates that not only does job specification determine selection and training, but that it in turn is determined by selection and training.*

An example of this interdependence should prove illuminating. An organization plans to introduce a new product; this demands new promotion methods, new channels of distribution, some market (consumer) research, and policies of administration and requires a marketing manager. A cursory examination of the job to be done will probably be the basis for the selection of a marketing manager. The alternative to this is a thorough examination by a special body (consultant or own group) to determine the personal attributes of a marketing manager re-

quired to do the job. Regardless of the rigor of the investigation, it will be the basis for the selection of the new manager. Since the job of marketing manager for this new product has never been performed before in this organization, the basic attributes of the manager plus the training he receives will significantly affect his performance. To continue with this example, after 10 years the initial manager retires. By now a thorough investigation of how the job of marketing manager was performed, resulting in a job description and job specification, should have been accomplished. Thus, the cycle takes another turn, with the job specification determining the selection and training which determine the individual's performance which determines the job and consequently determines or changes the job specification. In this interdependence, the rigorous and explicit defining of the job specifications cannot be overemphasized. A slipshod job specification in effect results in slipshod selection and training.

A long-standing complaint of administrators is that the incumbent-determined nature of executive positions renders it impossible to record an accurate job specification. That it is more difficult than specifying factory jobs (e.g., a punch press operator) is conceded, but this does not mean the attempt should not be made, particularly in view of the critical importance of the job specification's relationships in the hiring function. The more dynamic the nature of the job, that is, the greater the opportunity for the incumbent to influence it, the more necessary it becomes for the job description and specification to be reviewed and revised frequently. This caution would certainly be applicable to the above-mentioned marketing manager. On the other hand, a punch press operator's job, due to the minimal opportunity for the operator to influence how the job will be done, requires comparatively infrequent revisions. The maintenance of accurate job specifications, i.e. those which are continually revised to correspond to the actions of the man presently doing the job, are of cardinal importance to the process of selection and training.

SELECTION

Referring to the above marketing manager example, it can be visualized how the qualities of the individual selected, especially his lack of required attributes, should determine the training that he will experience. This training, coupled with the basic attributes he had at the time of selection, will determine the type of job he will do as marketing manager. Thus, it can be seen how selection determines training and this training, which influences the performance of the job, determines job specification.

On the other hand, who would be selected for the job of marketing manager? It is the function of selection to compare the individual's attributes with the requirements of the job in an effort to obtain the best fit. The training program is addressed to making up the difference between the individual's attributes and the job requirements. Consequently, the manager hired will be determined by a combination of the training facilities available plus the requirements stated in the job specification.

The consequences of selecting over-qualified or under-qualified individuals for the marketing manager's job can best exemplify the relation of selection to job specification and training. The qualifications of the individual will significantly determine the traning program he will be given. Obviously, the over-qualified individual will require a less extensive training program than the under-qualified one. It can also be hypothesized that the over-qualified individual will tend to expand the job and possibly attempt to take on some of the duties of his superiors, thus requiring a redefinition of the job and job specification. Now, if this is not a desired consequence on the part of management then they must temper their selection and—to take the other extreme for illustrative purposes—hire the under-qualified individual. To do this, adequate facilities for training must be available, and possibly some of the duties ascribed to the marketing manager's position must be allocated to others. This also requires a redefinition of the job and the job specification. The availability of training facilities in addition to the feasibility of expanding or contracting the job will determine who will be selected. Essentially what is being said is *that selection determines job specification and training as well as being determined by them.*

This interdependence makes it imperative that the selecting of an individual be a management responsibility and that it not be relegated to an outside organization. In this day of psychological testing, depth interviewing, and intelligence testing, to name just a few methods of selection, a perfection has been ascribed to these selection methods which has been grossly exaggerated.[2] An article by B. Hoffman in Harper's states that "Busy executives—especially those who secretly lack confidence in their own judgement—are only too happy to hand over to professional testers the job of deciding who is worthy and who is not." Since management has first-hand awareness of the job to be done and the training facilities available, it would seem elementary that they make the decision. The decision in question is not the one of whether the consultant's or the *test's* recommendation will

[2]This point is specifically dealt with by B. Hoffmann, "The Tyranny of Multiple-Choice Tests" *Harper's Magazine,* Vol 222 (March 1961), pp. 37-44.

be accepted; but rather one of "what information about the prospective employee is needed?" "How shall this information be obtained?" and finally, "How does the information pertinent to the individual measure up against the organization's facilities and needs?" This not only requires the administrator's understanding of the methods of selection but also the relationship of selection to training (organization facilities) and job specification (organization needs).

TRAINING

The focus in this section will be training's interdependence with job specification and selection. The function of a training (introductory) program is to reduce the differences between the personal attributes the job demands and the attributes that the individual selected for the job possesses by enhancing the latter. The lack of formal training facilities in an organization would force a high emphasis on selecting individuals who, at the time of selection, possess the necessary attributes to do the job required. In this case should an under-qualified individual be selected, his ineffective job performance should be expected. However, if sufficient training facilities are available, then the less qualified individual can be selected and trained to perform the job satisfactorily. The significant consequence of training is changed behaviour. The changed behaviour is the result of an experience that has made the trainee aware of some important variables which are pertinent to administrative decisions. And, in conclusion, it can be seen that this changed behaviour changes the job specification and affects selection.

On the other hand, it can be seen how the job specification and selection affect training. This can be shown by taking the marketing manager as an example and hypothesizing that he had no field experience, which was a requisite of the job, relating to the new product to be introduced. A program including some field experience plus literature on other people's field experience could be devised and instituted, thus compensating for one of the individual's shortcomings, yet benefiting through his assets. Once again, what is being said is that *training determines job specification and selection as well as being determined by them.*

This interdependence underlines the problem involved in rigid, pre-determined training programs. As stated above the function of training is to alleviate the differences between the personal attributes the job requires and the attributes the individual selected possesses. It seems obvious that a rigid, pre-determined training program does not take into account the attributes the individual possesses. It could not possibly take these attributes into account if it is determined before the individual is selected. Rather than focusing on establishing a program, management would be better advised to appraise their training facilities in terms of training personnel, materials available, outside resources, et cetera. If the facilities are found wanting in terms of the relationships of the organization's needs (personnel) and the capacity of the individuals selected, then a program to improve training facilities is necessary. The keynote in this discussion is to keep the training facilities and programs *flexible* and in tune with *both* the organization's and the individual's needs.

CONCLUSION AND LIMITATIONS

The ultimate goal in hiring personnel is to obtain the optimum compatibility between the man and the job. The relationship of the concepts that describe this process has been depicted in figure 1. Highlighted for special consideration has been the critical interdependence of job specification, selection, and training. The point of this article is to encourage the administrator to be a more effective administrator (low turnover and low unrest) by being cognizant of the whole *process* of hiring and not only of the discrete concepts involved. The scheme (figure 1) designed to describe this process is necessarily a flexible one that can adapt to the dynamic nature of the hiring territory. If the person with exactly the required personal attributes could be selected and subjected to the predetermined training program, resulting in his performing the job the way it was described, then there would be no need for an adaptive scheme. However, this is far too idealistic to contemplate seriously, even though it still would not negate the scheme, but rather make the relationships unrealistically pre-determined. The interrelationships of this scheme should provide the administrator with a more realistic flexibility in the hiring process.

What about the limitations of this scheme? If the scheme does not explain the process of hiring (a territory) then it should be discarded. It would be folly to attempt to adjust the territory to fit the scheme. Therefore, to evaluate the utility of the scheme, the administrator should vigorously appraise the process of hiring in his organization and its consequent effectiveness in relation to the process advocated here. In essence, the onus of establishing limitations is left with the administrator.

The scheme presented is expected to satisfy both company and individual needs, thus resulting in more effective administration of personnel. Both the concepts involved and the discussion presented have the similarity of a logical, rational, and explicit

character. However, the territory of administration would be misrepresented if it were described as being only logical, rational, and explicit in nature. Thus, to envision these concepts and their interdependence as the panacea of the hiring process is as short-sighted as ignoring them. The non-logical behavioural aspects of an organization's peculiar situation will undoubtedly temper the scheme presented. However, not withstanding the effect of the non-logics, it is expected that the scheme presented is adaptive to the dynamic territory of hiring and is a positive contribution to the reduction of turnover and unrest.

CHANGING TO DECIMALS

Committees appointed two years ago by the British Association for the Advancement of British Chambers of Commerce to investigate the advisability of changing the decimal coinage and the metric system in the United Kingdom have now issued a joint report. They conclude in favour of a decimal coinage but are more reserved in their attitude to the metric system. Before reaching this result they consulted trade associations and chambers of commerce, individual firms, government departments, local authorities, public utilities and nationalized industries, British trade commissioners overseas, learned and professional societies and educational authorities. Their report is based on very thorough research.

They recommend the government to take an early decision on the question of principle involved in currency reform. There is no glossing over objections or difficulties. The cost would be immense. Machine conversion alone, from cash registers to taximeters, would amount to £128 million. There would be many indirect expenses as a consequence of the alterations needed in business arrangements. But to estimate the financial gains is less easy. Some firms think they would be enough to justify the change. Generally speaking, industry and commerce are in favour. The reaction of schoolteachers, hoping to be relieved of the obligation of inculcating of £s.d., needs no expatiation.

Whereas the coinage is officially established, the metric system is legal in Great Britain. Whether anybody adopts it is a matter of choice. There is no very strong feeling that British industry is suffering seriously because of its failure to do so. This does not, apparently, militate against our foreign sales. But Sir Alexander Fleck, formerly chairman of Imperial Chemical Industries, Ltd., puts the argument in a nutshell when he remarks, in an introduction to the report, that gradualness is the keynote of the committees' recommendation. Evolution and not revolution, he says, is the way to progress. According to the report, in some industries the changeover would take from ten to as long as twenty or thirty years, which ought to be gradual enough for the most conservative. As many as 84 per cent of the respondents to the questionnaires sent out were in favour of the change, but reservations were made regarding the willingness of America and the Commonwealth to co-operate. To meet the problem the committees recommend that there should be two-yearly review of the situation by the Board of Trade in conjunction with corresponding authorities in the Commonwealth and the United States.

—The Manager

Canadian Economic Growth in the Early 1960's

While consumption and government expenditures have provided a strong support for expansion, exports and investment reflect a weakening of growth forces, the authors note. In this article they consider the factors behind Canada's slow start in the 1960's.

RICHARD H. HOLTON AND DAVID C. SMITH

Between 1947 and 1959, the Canadian Gross National Product rose almost exactly half again as fast as did that of the United States. During this period, Americans became far more conscious of their glamorous neighbor to the north; they looked to her as an increasingly important source of raw materials, as a strategic defense partner, and as an exciting and remunerative place for direct investment.[1] The Canadians have not been altogether pleased with this new attention from the U.S. Though Canadian-American relations undoubtedly face some mildly uncomfortable times ahead, there is little doubt that the U.S. will continue its intense interest in the Canadian economy and the Canadian people.

The postwar boom in Canada, when viewed in historical perspective, shares many of the features that marked earlier periods of accelerated growth in Canada. The Canadian prosperity of recent years has had its foundation in a strong export market for certain basic Canadian commodities, primarily minerals. Earlier years saw the wheat boom of 1900-13 and then later, as the U.S. metropolitan newspapers grew while U.S. pulpwood supplies were dwindling, the rapid increase in the export of newsprint and wood pulp. Even in the eighteenth and nineteenth centuries, the surges in Canadian growth could be traced to the development and exploitation of some new export staple.

It now appears that the external stimuli to the Canadian economy quite possibly may not be as strong through the early 1960's as has been the case in the years since World War II. What are the implications of this sluggishness in the export market? Has the economic structure of the Canadian economy changed sufficiently to insulate it from the world market conditions? Or is it inevitable that Canada will face two or three years of relatively slow growth?

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[1]The problem of U.S.-Canadian economic relations is treated in ***Canada-United States Economic Relations*** by Irving Brecher and S. S. Reisman, Royal Commission on Canada's Economic Prospects (Ottawa, 1957).

THE PATTERN OF CANADIAN GROWTH[2]

To answer these questions, it will be helpful to review the basic causes of Canadian growth in the past and to see how the demand for export staples has had its repercussions throughout the economy. The developments of the last few years will then be compared with the historical pattern as a prelude to assessing the outlook for the early 1960's. Then some conclusions can be drawn as to how the interesting external financing mechanism that has operated in the past may operate over the next few years.

The succession of export staples that have stimulated Canadian economic development over the past 250 years is quite impressive. The Newfoundland fisheries provided the first cause for modest settlement. In the course of the search for new fishing grounds, the possibilities of the fur trade were first discovered. But the fur trade was antithetical to settlement for a number of reasons. The beaver's distinct preference for dense woods rather than cleared land as habitat understandably led the trading companies to the view that the fewer settlers the better. The Indians provided an ample labor supply for this work except for the indispensable *courriers de bois,* who served as the essential link with the Indians. Furthermore, because the trading goods from Europe were far bulkier than the furs that comprised the eastbound cargo, shipping space westbound from Europe was at a premium.[3] Settlers, therefore, had to pay higher rates than if the excess capacity were on the westbound portion of the trip.

[2]Much of the material in this section is drawn from *The Canadian Economy; Prospect and Retrospect,* by Richard E. Caves and Richard H. Holton (Cambridge, 1959), especially Chapters 2-6.

The Napoleonic wars brought the next major export staple boom when Britain turned to Canada for much of her naval timber requirements after her usual sources on the Baltic were endangered. Lumbering, quite unlike the fur trade, generated settlement and cleared land almost automatically. Furthermore, the eastbound cargo was far bulkier than the westbound freight (mostly settlers' supplies), so immigrants were brought to Canada at bargain rates.

By the middle of the nineteenth century, Britain had removed the preferential tariffs on Canadian lumber, but by this time the U.S. was growing at such a rate that Canadian lumber found a ready market south of the border. Meanwhile, in the backwash of the lumber camps, agriculture had developed and now was providing Europe with significant quantities of foodstuffs, particularly wheat, bacon, and cheese from central Canada.

The three major expansionary periods of the twentieth century, however, are the ones most noteworthy for purposes of this paper because they occurred after so many of the institutional factors at work today had developed. They reveal that, while the growth process has been based on a complex interaction of changes in components of aggregate demand and in supplies of factors of production, there has been a very close dependence on foreign economic conditions. The following crude model will provide an important basis for examining recent experience.

Let us suppose first of all that Canadian exports of a basic staple increase. The reason for this increase may be an upsurge in world demand for the commodity, or it may be, as in the case of wheat or minerals, that technological changes or rising costs in competing supply areas of the world improve Canada's competitive position. These factors may appear in combination or individually.

The export demand for the staple brings an upsurge in investment in plant and equipment needed in the export industry itself. Plant and equipment expenditures may rise not only in the export industry but also in other industries, such as shipping and raw material processing, which may be directly affected. This investment typically lags a bit behind the export demand simply because investment decisions cannot be made and implemented instantaneously. Changes in the level of investment expenditures together with changes in the level of exports have been the main causes of changes in the level of gross national expenditure in Canada. Gross national expenditure determines personal-income levels, and personal income in turn determines the level of consumption expenditures. There is some evidence that these consumption expenditures tend to lag behind personal income by a year, largely because consumption habits prevent immediate changes in consumption expenditures commensurate with income changes. This effect operates in both directions, i.e., when incomes fall, consumption expenditures seldom fall immediately into a long-run relationship with the new income level. Rather, these expenditures remain relatively high because people are slow to adjust their spending to the lower income level.

During the period when the exports of the staple are increasing rapidly, the level of imports both to the expansion in investment outlays and to the rise in personal-consumption expenditures. Canada's income elasticity of demand for imports is fairly high and is likely to be especially high during these periods of expansion. It is then that domestic manufacturers of both consumer goods and investment goods are operating at or near capacity, and some of the demand for both types of goods will spill over and become a demand for imports.

The total effect of a new export staple will depend in large part in the effect on immigration. In the case of the wheat boom of 1900-13, labor requirements of new export staple were so immense that the population of Canada rose from 5.4 million to 7.2 million between 1901 and 1911, and by 1921, the census recorded 8.8 million persons. When immigration of this magnitude occurs, the demand for residential construction and for construction associated with many of the services creates a different type of demand for investment goods. Just how strong will be the demand for residential construction depends not only on the rate of immigration but also on the available stock of housing; so this particular repercussion from the export staple is only a possibility, not a certainty.

In this picture of the export upsurge and its repercussions, the role of foreign capital is particularly critical. The rise in imports of consumption goods, and particularly of investment goods, generates a deficit on current account. But the investment expansion is financed in large measure by foreign capital, so capital imports are substantial. The role of these capital imports is clearly two-fold. They make it possible for the economy to expand its capital plant in response to the export demand more quickly and with less strain on domestic resources and prices than would be the case if the investment were to be financed with domestic savings alone. Furthermore, these capital imports prevent the adverse current account balance from putting the Canadian dollar

[8]Harold A. Innis, "Unused Capacity as a Factor in Canadian Economic History," *Canadian Journal of Economics and Political Science,* Vol. II (February, 1936), pp.1-15. Reprinted in Innis, *Essays in Canadian Economic History* (Toronto, 1956), pp. 141-155.

TABLE I

TEN LEADING CANADIAN EXPORTS, BY VALUE, 1939 AND 1957

(millions of dollars)

1939		1957	
Newsprint paper	115	Newsprint paper	715
Wheat	109	Wheat	380
Nickel	58	Woodpulp	293
Copper and its products	53	Planks and boards	282
Planks and boards	48	Nickel	248
Aluminum and products	35	Aluminum and products	230
Woodpulp	31	Copper and its products	169
Fish and products	29	Iron ore	152
Automobiles and parts	25	Petroleum and products	155
Fruits and vegetables	20	Fish and products	131

Source: Dominion Bureau of Statistics, *Canadian Statistical Review,* 1957 *Supplement,* Table 50, and October, 1959, Table 50.

under too great a pressure. In fact, it is quite accurate to say that the current account balance is adverse in part because of the capital inflow.

GROWTH SINCE WORLD WAR II

The nature of the postwar expansion is reflected in Table I, which shows the 10 leading exports in 1939 and again in 1957, when exports as a whole were at a peak. Note that automobiles and automobile parts and fruits and vegetables had dropped off the list by 1957 and that petroleum and iron ore had been added. In 1939, the exports of the latter two items were negligible. There was no production of uranium ore and concentrates in 1939, yet by 1957, they fell only four million dollars short of qualifying for the leading ten export items. A more adequate picture of the change in leading export items over the 1939-57 period is reflected in the fact that during that time the proportion of total exports accounted for by minerals rose from 26.5 percent to 37.2 percent.

This increase in the role of mineral production in Canadian exports was accompanied by a shift of trade to the U.S., while the United Kingdom declined in relative importance as a market for Canadian goods. This drift saw the U.S. taking 59 percent of Canadian exports in 1957 as compared with only 41 percent in 1939. The United Kingdom, meanwhile, had reduced its share from 35 percent to 15 percent. Canada's trade has now clearly turned around from east-west to north-south.

The important role of the export staple in the postwar expansion is demonstrated by the decrease in the proportion of exports "fully manufactured" from 44 percent to 36 percent during the 1939-57 period. The proportion accounted for by raw materials rose from 30 to 32 percent and by partly manufactured goods from 27 to 32 percent. So the postwar expansion was like the others in that it was tied to export staples. It differed in that it was turned more toward the United States than toward the rest of the world, and the new exports were largely minerals, although forest products showed continued strength.

Although exports in the 1950's were equal to about 15 percent of the GNP, this ratio was lower than in the latter half of the 1920's, when exports amounted to roughly 20 percent of the GNP. Therefore, the reliance of the Canadian economy on the export market, though still very great, is declining slowly.

Did the pattern of investment expenditures follow the expected pattern during this period? Investment in the forestry, mining, and those manufacturing industries which are important exporters of processed primary materials[4] in 1937-39 accounted for 15 to 18 percent of total investment. In 1947, this proportion stood at over 20 percent, and in 1948, at 19 percent. During 1951-54, investment in other sectors rose at such a rate as to depress the export industries' share to 10 and 11 percent, presumably because of greater investment in defense industries and in manufacturing industries producing for the domestic market. Thus there is some evidence of a lagged response of this latter type of investment in the primary industries. By 1956, the export-oriented industries' proportion of

[4]Wood products, paper products, non-ferrous metal products and non-metallic mineral products.

total investment had moved up again, reaching nearly 15 percent before declining to only 9.2 percent in 1958. The proportion would have been considerably greater in 1954 and 1955 had it not been for the significant increases in investment in housing.

Personal income and personal consumption expenditures followed the increase in gross national expenditure rather closely, but they contribute in their own way to the expansionary process. The gross national expenditure increased by about 450 percent in current dollars, 1939-57, and as a result, personal income increased by nearly the same ratio, 435 percent. Because of higher tax rates in 1957, the ratio of disposable to total personal income fell somewhat, and personal-consumption expenditures rose only by about 410 percent. But the point worth noting at this juncture is that personal consumption expenditures on durable goods rose nearly twice as fast as personal consumption expenditures, or about 730 percent. Undoubtedly this huge increase in consumer-durables output accounted for a substantial portion of the increase in capital expenditures in manufacturing during these years.

Personal consumption expenditures during most of the postwar years have been a source of considerable stability. When incomes have varied from one year to the next, the savings rate, rather than the rate of consumption, has absorbed most of the fluctuation. Thus, personal savings have provided quite a stabilizing, cushioning effect.[5]

Did the export boom attract immigrants, as had been true especially in the days of the wheat boom and the opening of the prairies? In the five years 1936-40, gross immigration ranged from 11,000 to about 17,000 persons. But during the five years beginning with 1951, the range was from 109,000 to 194,000, with the average being over 158,000. This enormous influx was the result in part of the efforts of the Canadian government, which maintained offices abroad to promote immigration actively. Such an immigration program would not have been pursued, of course, if there had been no jobs for the newcomers. But it is probably true, nonetheless, that immigration was greater than it would have been without the active solicitation by the Canadian government. In 1957, gross immigration was an enormous 282,000, in part because the Suez experience had jumped the United Kingdom immigration to Canada from 50,000 in 1956 to 109,000 in the following year.

This immigration was only one of the causes of the great expansion of the total Canadian population after the war. After having grown in population only from 10.4 to 11.5 million during the period 1931-41, the country added another 2.5 million by 1951 and still another 3 million since then. The 1958 population figure was 17 million.

Since the population now is almost 50 percent greater than just before the war, one is certainly permitted to ask where all these people are working. Did the new export staple industries absorb them directly?

Here again let us compare 1939, the prosperous prewar year, with 1957, the most recent year of prosperity for which our data are complete. The population over that period rose by a huge 47 percent. The work force, however, rose only 30 percent, largely because of the shift in the age distribution. Canada has not only been a *young* country in the past; in recent years she has grown a little younger. One can note in passing that the consequent increase in the number of persons supported by each member of the work force has significance for consumption expenditures.

Jobs for all these new workers were clearly not provided in the agricultural sector, which had provided so much employment during the 1900-13 period. Between 1939 and 1957, employment in agriculture actually fell precipitously, as in the U.S., from about 1.4 million to scarcely more than half that. So the Canadian economy had to provide jobs not only for the workers among the immigrants and for those resulting from the natural increase in population but also for the workers leaving agriculture. In forestry, where employment has been very erratic, the number of jobs available during some of the postwar years was more than twice the 1939 figure. By 1957, however, the number of forestry jobs stood at only about 60 percent above the prewar level. So the percentage increase in forestry employment was about twice as great as the increase in the total work force. But since this sector is so small (only about two percent of the work force is in forestry), we must look elsewhere for the bulk of the jobs provided the new workers.

We have said that the exports were strong in the postwar years primarily because of the world demand for Canada's minerals. Did the mines absorb the 30 percent increase in the work force? Interestingly enough, the answer is no. Employment in mining increased only 36 percent in 1939-57, just slightly more than total employment.

The new workers seem to have found employment primarily in manufacturing and construction and, to a lesser extent, in the service sectors of the economy. It is interesting to note that, within the manufacturing sector, employment in durable goods increased substantially more than in non-durables.

[5]This cushioning effect is especially noticeable if the savings exclusive of farm inventory changes are plotted over time.

Table II shows the percentage increase in employment, 1939-57, for the various sectors. The employment effect of the export boom perhaps can be summarized from this table alone: it has not been the export raw-material industries themselves that have provided the large increases in jobs, but rather, manufacturing, in general (but especially the export-oriented manufacturing industries) and the tertiary sector. Thus much of the increase in investment expenditures in mining, quarrying, and oil wells, noted earlier was providing employment in the manufacturing and construction sectors. The multiplier and accelerator effects of the initial investments in mining and oil wells and, of course, in the plants that process the output, at least to some degree before exporting, thus provided jobs for the new workers; they did not find employment in the raw material industries themselves.

TABLE II

PERCENTAGE CHANGES IN EMPLOYMENT IN CANADA, 1939-1957

	Percent
Agriculture	—46
Forestry	67
Mining	36
Manufacturing	106
Wood products	74
Paper products	110
Non-ferrous metal products*	171
Non-metallic mineral products*	189
Construction	119
Trade	114
Finance, insurance and real estate	114
Service	132

*Percentage increase shown is for 1939-56 instead of 1939-57.
Source: Dominion Bureau of Statistics, *Canadian Statistical Review Supplement,* 1957, Tables 7, 9; *Canadian Statistical Review,* October 1959, Table 8 and 9; *Canada Year Book,* 1957-58, p. 762.

FINANCING OF CAPACITY EXPANSION

As we have seen, in the adjustment of the Canadian growth rate in response to external market conditions, net flows of foreign savings have usually played a key role. As the incentives to expand productive capacity have increased because of improved export prospects, resources available for investment have increased to a large extent. This has bee n accomplished by drawing on foreign resources rather than by diverting resources from consumption, exports, or government activities. Thus, net inflows of foreign savings have served to supplement domestic savings during periods of rapid expansion of capacity stimulated by improved export conditions. The recent experience of the 'fifties is no exception. The period of current account surpluses beginning in 1934 ended in 1950, and during the years 1950-58 the annual average deficit on current account was $682 million, or 12 percent of gross domestic investment.

The smoothness of the transfer process in the 'fifties has depended again upon capital inflows and imports being related to a common set of factors that influence domestic economic activity. First, demand for imports has risen relative to domestic production in prosperous periods and fallen during depressed periods. Table III provides some insight into the reason for the high-income elasticity of demand for imports. Imports of investment goods have always been a high proportion both of total imports and of fixed business investment. In recent years, these investment goods have been about 30 percent of total merchandise imports and about one-third of fixed business investment. Both figures have, in fact, been higher than in the prosperous year of 1928. A rise in domestic investment has thus led to a large rise in imports of investment goods. In addition, the ratios in Table III suggest that in boom years, the pressures on domestic capacity lead to a greater reliance on imports than is the case when conditions are not as tight.

Secondly, to a large extent the rise in investment has been due to the occurrence of inflows of long-term foreign funds; and in some cases, businesses, especially foreign subsidiaries, import foreign capital in the form of machinery and equipment. Net direct investment inflows, which have been closely related to incentives to invest, have accounted for about 52 percent of net capital inflows during the period 1950-58. The bulk of direct investment has gone into extractive industries where export prospects were particularly high. Net new issues of Canadian securities abroad have accounted for most of the other net capital inflow and have reflected changes in relative interest costs at home and abroad, which in turn appear to have been a good reflection of the relative profitability of investment in Canada.[6]

Because of the close interdependence of imports and long-term capital flows in the 'fifties, the Canadian dollar has traded at a premium over the U.S. dollar rather than at a discount—despite dramatic changes in the current account. With long-term capital flows offsetting current-account deficits, short-term capital flows have been, as a result of the confidence in this mechanism, generally stabilizing over the recent period. Thus, while the Canadian dollar, in terms of the U.S. dollar, appreciated after it was set free in 1950, it has remained relatively

[6]It is probably also true that some foreign investors have been motivated by news of a few high returns rather than by average returns on investment of new funds in Canada.

TABLE III

COMPOSITION OF CANADIAN IMPORTS, 1928, 1950-1958

Year	Percentage Distribution of Imports*			Investment goods imports as a percent of fixed business investment	Consumer goods imports as a percent of personal consumption of goods
	Industrial materials	Investment goods	Consumer goods		
1928	34.1	18.1	30.9	24.6	13.8
1950	31.6	22.1	29.8	29.1	11.3
1951	33.5	25.2	26.9	33.7	11.7
1952	28.1	29.8	27.5	34.6	11.1
1953	26.8	30.4	29.5	35.2	12.5
1954	26.0	29.8	30.9	34.3	12.2
1955	27.1	30.1	30.3	37.1	12.6
1956	27.0	32.7	28.6	35.5	13.4
1957	26.0	32.7	29.2	31.0	12.8
1958	25.8	30.1	32.7	30.4	12.7

*The first three columns do not add to 100 percent because a few items—fuels and lubricants, settlers' effects, Canadian goods returned, and military supplies for NATO forces—are excluded from the classification.

Source: Calculated from Bank of Canada, *Statistical Summary,* 1956, pp.98-99; and, October, 1959, pp. 463-464; Dominion Bureau of Statistics, *National Accounts, Income and Expenditure,* various years. The import classification for 1928 was estimated from trade statistics.

stable since 1952. The annual average of the spot rates on the Canadian dollar has been fairly steady within a range of a two to five percent premium over the U.S. dollar.

The recent period of growth has been similar to earlier periods in another respect. The deficits on balance of trade, as well as on current account during the 'fifties,[7] have cast doubt on the continually popular stage theory that economic growth in an open economy is necessarily associated with systematic changes in the balance of payments and economic structure that move a country from an immature debtor to a mature creditor.[8] The emergence of a balance-of-trade surplus in the 'thirties and the net repayment of long-term capital in the 'thirties and 'forties were heralded as evidence of a new stage in the Canadian economic structure and of evidence of the role Canada would be playing in the support of foreign economic development through the next export of capital.[9] The recent large net-capital inflows and the high ratio of equity to debt capital in these flows will tend to perpetuate the Canadian debtor status, although the charge on foreign indebtedness is likely to fluctuate more closely with business conditions the higher the ratio of equity to debt.

On the one hand it is true, however, that deficits on balance of trade will not continue for long if, as is probably the case, the growth in interest and dividend payments in the current account exceeds the growth of net capital inflows.[10] On the other hand, unless there is a rise in the rate of domestic savings or a fall in the marginal capital-output ratio, continued current account deficits are necessary if the domestic growth rate is to be maintained.

RECENT GROWTH EXPERIENCE

One of the striking features of twentieth-century growth in Canada is not, therefore, that each prosperous period has been marked by a distinctive set of characteristics but rather that the growth adjustment mechanism has not been very different. The changes in the economic structure have not been so great that a simple, though admittedly crude, model cannot be used to analyze the main periods of Canadian growth during the twentieth century. The impact of external factors on the growth process has thus during the 'fifties borne many similarities to the period 1900-1913. It has been argued on the one

[7]The one exception is 1952 when a balance of trade surplus was recorded due to a sudden favourable shift in the terms of trade.

[8]For examples of continual homage to the debtor-creditor stage theory of economic development in international trade text-books see: C. P. Kindleberger, *International Economics* (Homewood, Illinois: R. D. Irwin, Inc. 1955), pp. 367-371; S. Enke and V. Salera, *International Economics* (New York: Prentice-Hall, Inc., 1951), pp. 501-506.

[9]Representative of widespread views in the 'thirties and 'forties is J.F. Parkinson's statement in 1940 that "the existence of a regular surplus of exports indicates that Canada has now reached a stage in its economic development appropriate to a 'mature debtor' country." "Canada's International Accounts and the Foreign Exchanges," in *Canadian Investment and Foreign Exchange Problems,* ed. J. F. Parkinson (Toronto: University of Toronto Press, 1940), p. 17.

[10]For a formal presentation of the the rather unlikely conditions which are necessary for a borrowing country to continue to have deficits on its balance of trade, see E. D. Domar, "The Effect of Foreign Investment on the Balance of Payments," *American Economic Review,* Vol. XL (December, 1950), pp. 805-826.

hand that aggregate investment was beginning to decline because export capacity had finally caught up to demand, and, on the other hand, that the rate of growth of export demand was beginning to taper off. Primarily as a result of these two factors, the Canadian growth rate was becoming more sluggish, and if it had not been for the outbreak of World War I, the sluggishness would have become increasingly apparent.[11]

During the past two years, the Canadian growth rate has again shown some signs of weakening, but it may be argued that our forecasts of average growth over the next several years should not be influenced by recent experience of what has been accepted as a typical, mild, rhythmic movement in the growth process in North America. It is important, therefore, to consider the significance of the recent recession, especially since the 1953-54 recession was followed by a breath-taking period of economic growth.

With respect to both the size and duration of the decline in total output, the 1957-58 recession was less severe than the 1953 - 54 recession and both were relatively milder than the recessions in the United States during the same periods. Both also spread through foreign-trade channels, but, in contrast to 1953-54 when agricultural exports experienced only a temporary setback followed by a drop in farm income and agricultural investment, the 1957-58 recession reflected a more serious softening of export demand for many products of the resource-oriented industries, such as metals, minerals, and forest products. At the same time, due to the high rates of investment during the 'fifties, capacity output by 1957 had caught up to demand for output for the first time in many of the resource industries. Emergence of excess capacity led to a sharp curtailment of further investment, and for the year 1958, business capital expenditures were 44 percent below the 1957 level in the forest-and-mineral-products sector.[12] The main stimulus for a high growth rate, namely the expansion of capacity in resource industries, weakened at least temporarily. Fixed business investment declined relatively more in 1957-58 than in 1953-54, but imports of investment goods fell even more, ameliorating the effect on domestic output of producers' goods. Residential construction and government expenditures also served to bolster the economy. Residential construction had become an extremely important sector through which monetary policy was felt in the economy. As yields on financial assets rose during the tight money period 1955-57, the attractiveness to financial institutions of government-insured residential mortgages became less attractive due to the ceiling on the yields of such mortgages. As yields on financial assets declined during the recession and as more government funds were made available for direct lending by the Central Mortgage and Housing Corporation, the flood of pent-up demand was released and expenditures on residential construction rose by 25 percent in 1958 over 1957. The new Conservative government also increased government expenditures throughout the recession. Thus, public action played a greater role in the recent recession in halting the decline in output, but it was essentially temporary action. During the latter half of 1958, and during 1959, a substantial rise in output has occurred, and is expected to continue to occur in 1960, but growth forces have been weaker than in the period following the 1953-54 recession.

[11]J. J. Deutsch, "War Finance and the Canadian Economy," *Canadian Journal of Economics and Political Science,* Vol. VI (November, 1940), pp. 525-537.

[12]Canada, Department of Trade and Commerce, *Private and Public Investment in Canada,* Outlook 1959 (Ottawa: Queen's Printer, 1959), p. 7.

THE OUTLOOK

Despite a slight retardation in the last couple of years, the 'fifties have, on the average, been years of extremely rapid growth in Canada. The basic question of whether this average growth rate will be maintained in the early 1960's or whether there is evidence that the growth rate will have to adjust to a somewhat lower level still remains. The answer will undoubtedly hinge, as it has in the past, on the economic conditions of Canada's closest trading partners and on the nature of the Canadian adjustment mechanism. Without attempting to forecast foreign economic activity, let us accept, at least initially, the view expressed by many economists that the early 'sixties will be a period of rather sluggish growth in the U.S. We can then consider the probable outline of Canadian growth by combining this assumption with our knowledge of recent structural relations, inadequate as our knowledge of the latter may still be.

The foreign growth rate, particularly the growth rate of the U.S. economy, probably will be the most important determinant of growth in Canadian exports in the next few years, although shifts in foreign tastes towards or away from Canada's highly specialized bundle of exports, changes in foreign commercial policy, and competition from foreign sources of supply may alter the relation. It is doubtful, however, if we can reasonably expect Canadian exports to rise relative to United States export capacity has been built up in the 'fifties to the point where we can expect intensive efforts to capture a higher proportion of foreign demand. For most of Canada's main export items, however, foreign competitive sources of supply have also expanded greatly, and the competitive effects have already been made apparent recently, for instance, in Canadian exports of minerals that have been under pressure because of general excess cap-

acity in the world. With a fairly low rate of growth in the United States, a lowering of tariffs and other import restrictions in that country would appear to be unlikely. Moreover, a very significant strengthening of world markets and prices for agricultural products does not appear to be in sight. Finally, the development of European regional tariff preference systems will not have a significant effect on Canadian exports because of the types of Canadian products exported,[13] so we cannot expect the possibility of a higher growth rate in Europe than in the United States to stimulate greatly the growth of Canadian exports. As a result, exports are not expected to grow faster than United States GNP, which in turn means a lower rate of growth of exports than during the prosperous years of the 'fifties.

Partly as a result of export prospects, the rate of increase of investment expenditures and the ratio of investment expenditures to GNP are expected to decline slightly. Since productive capacity is high in relation to export demand, and there is no evidence of a very strong rise in export demand, capital formation in industries related to export trade probably will not show the dramatic increases of most of the post-World War II period. However, there will be offsetting factors, First, tight credit conditions since the end of 1958 have probably served to spread investment expenditures by some industries, such as utilities, over a longer period of time rather than to force abandonment of investment plans. Secondly, increased liquidity of business firms from rising profits since the 1957-58 recession should lead to some stimulation of investment. Thirdly, if, in a relative sense, there is some release of resources from the construction of productive capacity in resource industries, a keener competition will develop to shift some of these resources to construction in other sectors. Thus, even with a continuation of tight credit conditions, more favorable bids, for instance, on construction contracts may encourage capital formation in some areas that in recent years have been in a relatively weak bargaining position for resources. School construction and certain other social capital expenditures might well expand a bit for this reason.

With respect to expenditures on residential construction, public policy will continue to play an important role in its fluctuations, but, in general, the average rate of increase will not be very great until the mid-'sixties. Residential construction as a proportion of GNP averaged 4.7 percent during the period 1950-58, which is a little higher than we would expect during the following three or four years. Apart from credit conditions, the major influences bearing on this sector will be the stock of houses, the rate of family formation, and the growth of *per capita* disposable income. Because the rate of housing construction has been higher since 1945 than that of family formation, the abnormal supply condition that existed at the end of the war has been dissipated. The rate of family formation will be rather low for a few years until the higher birth rate that has existed since the end of the 'thirties begins to be reflected in a very high rate of family formation during the mid-sixties. In addition, the rate of net immigration, an important source of housing demand, has tapered off since 1957 and is unlikely to be as relatively significant during the next few years as it was during the period 1950-57. It is true that the expected rise in *per capita* disposable income will stimulate housing demand just by reducing crowded conditions and increasing replacements and major improvements, but the income elasticity of demand for housing is undoubtedly less than 1.0. In general, then, while both residential construction and business investment will be moving upwards in absolute terms, a rate of increase of the size that characterized much of the 'fifties is not expected.

Consumption expenditures are expected to provide a strong and relatively stable basis for economic expansion, and an annual average rate of increase of about 5 percent during the period compared to about 6 percent in the 'fifties is expected. Several reasons, in addition to the historical stability of the rate of increase, can be cited. No serious depression with levels of unemployment above recent recession level is foreseen, and personal income is expected to have a highly stable rate of increase. In addition, tax rates are not expected to rise and, if anything, will be lowered slightly. With regard to expenditures on consumer durables in particular, the possibility of some lengthening of repayment periods offered on consumer credit financing may serve to add extra strength to this sector, but the big rise in consumer durables will probably not occur until the rate of family formation increases in the mid-'sixties.

With respect to government expenditures, our impression is that expenditures by provincial and municipal governments will show a more rapid rate of increase than federal expenditures, though the increases may be at a slightly lower rate compared to recent experience because of a reduction in the lag of municipal services. On the federal level, the present government's philosophy suggests that large increases of expenditures are unlikely. Defense expenditures, assuming no increase in international tensions, will be roughly stable in absolute terms and will continue to decline as a percent of total government expenditures. In the absence of a serious

[13] R. E. Caves, "Europe's Unification and Canada's Trade," *Canadian Journal of Economics and Political Science*, Vol. XXV (August, 1959), pp. 249-258.

downturn of business activity, non-defense expenditures will probably be held to a rate of increase that permits a slight reduction in general tax rates and at the same time avoids budget deficits. Since forecasting government expenditures requires a forecast not only of business contitions but also of policy reactions to changing business conditiions, the above conclusions are highly tentative. It does appear however, that the new government's *vision* of massive projects to open the Canadian north and of expanding rapidly certain types of government expenditures for this purpose has become dimmer. In the future, a resurgence of export prospects for minerals and metals that would make extensive development of the north economical may well be done of the chief determinants of a marked increase in government expenditures.

We have argued that past evidence supports the hypothesis of treating merchandise imports as an endogenous variable determined not only by the growth of total output but also by the ratio of investment to output, domestic capacity conditions, and relative prices. Thus, a slower rate of growth of investment and slight decline in the investment-output ratio will tend to depress the rate of growth of imports. At the same time, a further retarding factor will be the expansion of productive capacity, particularly in the manufacturing sector, which has occurred in the 'fifties. The absence of strong pressures on capacity also will serve to prevent very significant increases in domestic prices relative to import prices ,although the role of the balance of payments adjustment mechanism will be considered below. In general, while these factors suggest that the rate of growth of merchandise imports will not be as high as in prosperous years of the 'fifties and will not be above the rate of growth of output, continual current-account deficits are expected. As servicing of foreign capital imported in the 'fifties gains in significance, interest and dividend payments are expected to be a higher proportion of current-account payments than during the 'fifties.

In summary, the somewhat lower expected rate of growth of exports during 1960-62 coupled with the present state of capacity in export and export-related industries will tend to reduce the rate at which investment and GNP expands relative to the 'fifties. The expected growth in consumption expenditures, residential construction, and government expenditures does not appear to be great enough to offset this. These outlays themselves reflect conditions in export markets and in fixed business investment. At the same time that investment is reduced slightly as a percent of total output, it is expected that net deficits on current account as a percent of total output will fall also, although deficits will continue to be a feature of Canadian growth.

Will these deficits be financed easily by international capital flows, or is there likely to be some pressure on the Canadian exchange rate? The answer must be couched at best in terms of probabilities. In contrast to the last half of the 'forties when balance-of-payments difficulties were last experiences, it can be said that foreign investors have "rediscovered" Canada and that the habits and institutions connected with foreign-investment inflows will, together with confidence in continued economic and political stability, produce a strong current in the flow of funds to Canada. On the other hand, we have noted that the bulk of foreign-investment inflows, especially of direct investment, have been attracted in the 'fifties by the development of resource industries, and we now expect returns on investments in this sector to be lower for a while. The Canadian dollar was worth a little over $1.05 U.S. in December, 1959. However, available statistics suggest that short-term capital flows played a relatively more important role in 1959 than previously in financing the near-record current-account deficit and in sustaining, and even pushing upward slightly, the value of the Canadian dollar. There appears to be more than a 50 percent chance that some pressure on the Canadian dollar will develop in the near future but that several adjustments will prevent a fall much below parity with the U.S. dollar. First, domestic production of import-competing products is in a stronger position now than a decade ago, and a depreciation of the exchange rate will stimulate further production of such products. Secondly, new issues of securities abroad have been highly sensitive to relative costs of borrowing at home and abroad and are therefore influenced by the costs of converting foreign funds into domestic. Thirdly, there will be some incentive to defer payments on foreign capital invested in Canada. Finally, while the price elasticity of demand for Canadian exports appears to be rather low in the short-run, a lower value of the Canadian dollar for a longer period will undoubtedly provide some increase in exports.

CONCLUSIONS

The process of growth in Canada has borne recently, and will continue to bear over the next few years, marked similarities to the mechanism of the past. Apart from minor fluctuations (which we do not attempt to forecast), the growth rate in the early 1960's will be a respectable one on the average but will be lower than the 5 percent rate of increase in real output experienced during most of the 1950's. This conclusion is based, however, on the assumption that growth in the United States will not jump to a rate much above the average for the past four years.

The adjustment mechanism will continue to work rather smoothly, although it appears that some slight downward pressure on the Canadian dollar will occur.

It does not appear that the next few years represent a prelude to a longer period of serious stagnation, since a number of factors point to a rise in the growth rate again in the mid-'sixties.

Unfortunately, unlike forecasters of the long-run, we cannot find solace and escape from embarassment in Keynes' truism about the long-run and mortality. Nevertheless, an intermediate-range forecast for the next three or four years may be of some practical significance, both because of the rather short time horizon of policy decisions and because of the need for refurbishing constantly on the basis of empirical tests the meager store of forecasting tools.

POSTSCRIPT

In the above article, written in 1959, we attempted to provide some general comments on historical determinants of Canadian economic growth and to hazard a view on the average growth rate in Canada during the period 1960-62. It is not our intention here to reappraise the outlook on the basis of economic data for 1959 and 1960, but several points should be noted.

There is some further evidence to support our general position. The early sixties got off to a bad start with a recession, but, more fundamentally, there does appear to have been an underlying retardation in the growth rate which began in the late fifties and is continuing in the early sixties. A highly important factor causing this has been a levelling off in the growth of demand for Canadian exports. From 1950 to 1956 the value of Canadian merchandise exports grew at a rate, compounded annually, of 7.5 percent while from 1956 to 1960 the rate of growth was only 2.8 percent. With the emergence of some excess capacity, especially in the export industries, and with the slowing down of residential construction, there has been a slight fall in the ratio of business gross fixed capital formation to GNP from 23 percent in 1956-57 to 20 percent in 1959 and 18 percent in 1960. Thus, while consumption and government expenditures have provided a strong support for expansion, exports and investment have reflected a weakening of growth forces. Forecasts of investment intentions for 1961 do not support an argument for a sharp reversal of this position at present.

Recent experience also reveals a number of points to which we did not give sufficient attention. Two may be noted in particular. First, the lower rate of growth at the beginning of the sixties is creating, and will likely continue to create, a more serious unemployment problem than we recognized. The problem is not one which has arisen merely from a short business cycle recession in 1960, but rather it is a longer-run one. Second, the current account deficit and capital inflow has been maintained at a higher level than we would have expected. This has partly been a product of Canadian policy. The attempt to stimulate the economy by budget deficits has not been as successful because that policy has been inappropriately combined with one of maintaining relatively tight credit conditions. As a result, foreign borrowing, the value of the Canadian dollar in terms of foreign curency, and the current account deficit have been maintained at higher levels than are appropriate for current economic conditions in Canada.

Does the faltering entry across the threshold of the sixties indicate that Canada will be groping through the gloom of economic stagnation during the rest of the decade? We still do not think that it does. There are a number of factors which continue to give support to an optimistic view of Canadian growth by the mid-sixties. Undoubtedly, as in the past, much will depend, however, on the strength of economic growth forces abroad, particularly in the United States, and on domestic economic policies to promote rather than hinder economic growth.

Canadian Taxation and the Businessman

K. W. Lemon, F.C.A.

In the Baby Budget of last December, the Minister of Finance announced a plan to allow accelerated depreciation as an incentive to encourage Canadian businessmen to move into depressed areas or to produce new products and thus to assist in the curing of our country's existing economic problems. Regulations have now been issued setting out the basis on which such accelerated depreciation will be permitted.

Under the legislation and accompanying regulations, the maximum amount of accelerated depreciation is limited to one year's additional depreciation at the normal rate for the class of asset concerned. This accelerated depreciation may be claimed by industries which meet certain tests and which produce, for the first time in a specified area, products not previously manufactured in that area or by companies which produce anywhere in Canada new products not previously made in this country. The additional depreciation may be claimed in any one of the first three years of a new operation or may be spread over the three years.

Unfortunately for our economy, accelerated depreciation allowed on this basis does not provide any significant incentive to Canadian industry to move to depressed areas or to produce new products. This can best be illustrated by an example. If a Canadian businessman establishes a new operation in a depressed area and acquires $100,000 of assets subject to a 20% rate of normal depreciation, he will be entitled to total additional depreciation of $20,000 during the first three years of the new operation. Under our diminishing balance basis of depreciation, however, the additional amount claimed in the early years will reduce the amounts allowable in each subsequent year. Accordingly, if the additional $20,000 is claimed in the first year (resulting in a total claim for that year of $40,000 rather than the normal amount of $20,000) the total depreciation allowable in the first five years of operation will be $75,424. On the other hand, if no accelerated depreciation is claimed, depreciation allowed during the first five years at normal rates would amount to $67,232. The incentive provided over the first five years, therefore, is additional depreciation of only $8,192 or, at a 50% income tax rate, a tax saving of $4,096. Due to the reduction of tax payments in the early years there will also be a saving of interest. Based on interest at 6% per annum less income tax thereon, however, this will amount to only $1,000 over the five year period.

On a ten year basis, additional depreciation on the same $100,000 of assets will amount to only $2,684 or a tax saving of $1,342. Net interest saved over the full ten year period amounts to approximately $1,350. Thus over a ten year period we have a total saving of only $2,700 and, of this, the tax portion ($1,343) will ultimately disappear completely. In the case of assets subject to a rate of depreciation less than 20%, savings would be proportionately smaller.

To the Canadian businessman a saving of $2,700 over ten years hardly provides sufficient incentive to expose an investment of $100,000 to a risk which he would not take otherwise. It is suggested, therefore, that if it is desirable for economic reasons to encourage industry to move into depressed areas or to produce new products, the incentive offered should be more effective. This might be accomplished by following the United Kingdom basis of permitting a true additional depreciation allowance which would be quite apart from and would not reduce the normal depreciation to be allowed in subsequent years. Alternatively, consideration could be given to permitting an initial tax-free period for new industries similar to that now granted to new mines.

Canadian Law and the Businessman

PETER V. V. BETTS

WHEN IS A JOINT ACCOUNT NOT JOINT?

The characteristic feature of joint ownership is the right of the survivor to become the absolute owner. For example, X and Y can own property together in common. Assuming each has one-half interest in the property, then on the death of X his half interest passes by his Will to say his widow, who then becomes the owner in common with Y. If on the other hand X and Y had been joint tenants, then the property would have passed all to Y independently of the Will of X, and his widow would have been left with no interest in this property. So far as real estate is concerned, the joint tenancy is pretty well confined to the case of husband and wife owning the family homestead and, apart from tax complications, gives little trouble.

On the other hand, joint bank accounts have become a fertile field for litigation. The case with which such an account is opened, as contrasted with the lasting implications thereof, have no doubt contributed to the attitude of the Courts. Upon opening the account, the joint depositors sign a printed form in part somewhat as follows, "We agree that all money . . . shall be the joint property of the undersigned with the right to survivorship . . ." Despite such a written Agreement, the Courts have usually treated such a bank account as quite the reverse and denied the right of the survivor to claim more than he contributed to the account.

Printed forms are a fetish with bankers. Everything is made to look perfunctory, and the clerk is almost apologetic as he asks for your signature to dozens of forms, all of which are alleged to be "routine," "standard," or "the usual thing." For this reason, the Courts, perhaps wisely, have refused to treat the form standing alone as binding between the parties. However valid such a document may be between the bank and its depositors, it is far from conclusive between the depositors themselves.

The Courts have generally been willing to go behind the written document to ascertain the intention of the parties. Between husband and wife or father and child, the Court has been prepared to concede that, in the absence of evidence to the contrary, the opening of a joint account is generally intended to carry the right of survivorship if the husband dies first. Where the wife dies first, however, the account does not necessarily pass to the husband. The theory behind these cases is that it is quite natural for a husband to provide for the future of his wife and children, whereas it is unusual to find the converse.

The Agreement with the bank is treated as designed by the bank purely for its own protection, and, in the absence of evidence to the contrary, the account will be treated as a tenancy in common with no right of survivorship, and each party of his estate is entitled to what he had deposited. Hence in Frosch vs. Dadd 1960. O.R. 435, two brothers had opened a joint bank account to which from time to time they contributed equally. Shortly before the death of one, the other withdrew all the funds to his own account. The Court compelled the survivor to return one-half of the money to the estate of the deceased, apparently not being convinced of the depositors' intention to create a true joint account with the incidence of survivorship.

The case will probably come as no great surprise to the profession, but it might serve as a warning to some businessmen, especially those carrying on business as partners.

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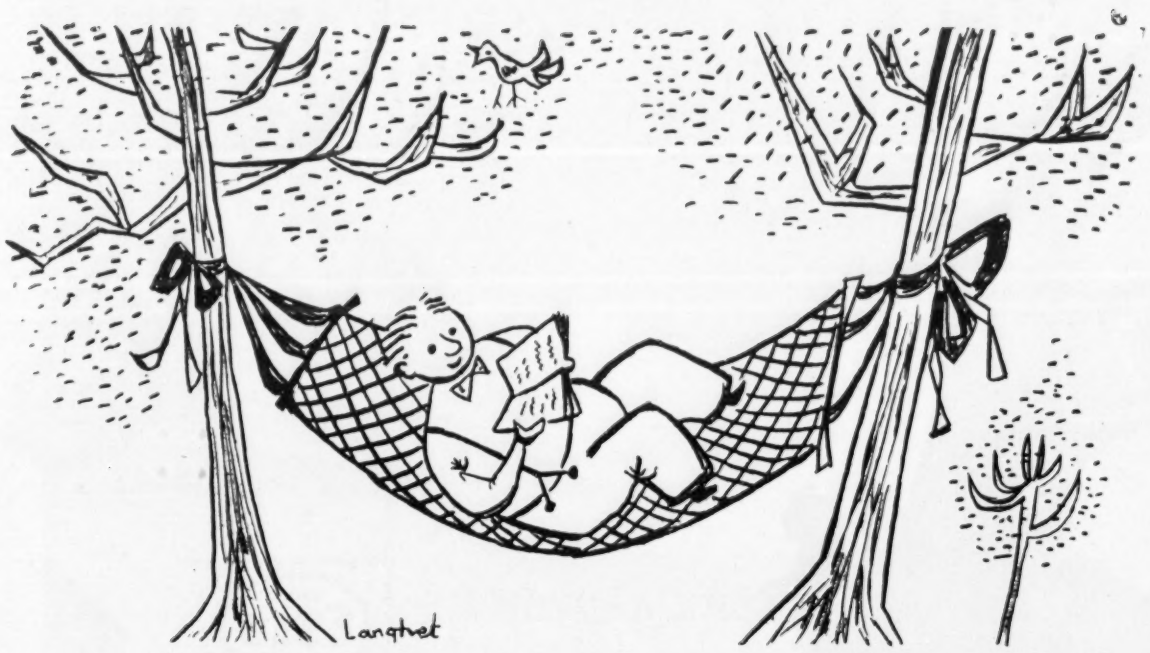

BOOKS FOR THE BUSINESSMAN

Reviewed in this Issue		*Reviewer*
ADVERTISING, MASS COMMUNICATION IN MARKETING	C. A. Kirkpatrick	*Donald H. Thain*
LEADERSHIP AND ORGANIZATION: A BEHAVIORAL SCIENCE APPROACH	Robert Tannenbaum, Irving R. Weschler, Fred Massarik	*Craig Lundberg*
MANUFACTURING PROCESSES IN CANADA	ed. by K. C. Livingston, T. C. Graham	*Michiel R. Leenders*
ON THE WRITING OF ADVERTISING	Walter Weir	*Wm. A. Preshing*

ADVERTISING, MASS COMMUNICATION IN MARKETING

by C. A. Kirkpatrick, Houghton Mifflin Company, Boston, 1959, 638 pp. $7.25.

This is an interesting, and in most respects, adequate general introduction to the field of advertising. As the author, who is a professor of marketing at the University of North Carolina, indicates in the preface, it is designed primarily for college students who have had little, if any, exposure to the subject. As such, the book is necessarily basic and elementary.

The outline and content of the book is described by the author as follows:

"Part 1 is introductory in that it contains background material. In this part, the nature of advertising, some social and economic aspects of advertising and marketing research are discussed. Part 2 is also pre-advertising in nature because it deals with the seller's identification methods—brand names, trademarks, trade characters, and packaging. Part 3 explains how advertisements are constructed, while Part 4 describes the media used to carry those advertisements to the person sellers want to influence. Part 5 is concerned with the total advertising program of manufacturers and retailers. In the 6th and final part, advertising is viewed through the eyes of the firm's management."

It is to the credit of the author that he does make a few departures from the usual outline of most introductory books on advertising. For example, Part 1 includes a chapter entitled "Social and Economic Aspects;" which is a reasonably penetrating and comprehensive treatment of the many debatable issues in regard to the effects of advertising on our economy and society. In certain circles it has always been fashionable to throw brickbats at advertising. However, the intensity of the criticism of advertising has, if anything, increased over the last few years. This development can be explained simply by the fact that advertising is essentially materialistic—it attempts to sell *things* and *services*—and the many overly materialistic aspects of our "affluent society" have been justly singled out for criticism by a number of the best Western thinkers. Advertising is, nevertheless, an inherent and vitally necessary part of our free enterprise system. As such, it has an important role to play as an economic leader (or, if you prefer, persuader). Those who wish to hobble advertising efforts should therefore be made

aware of the probable consequences of their attacks. In other words, we must consider the debate about advertising from many points of view. And there is probably no better place to expose students to the many different aspects of the question than in the beginning chapters of a text book on advertising.

Another thought-provoking deviation from the usual outline of most introductory books on advertising is the conclusion of a chapter on marketing research. This describes in some detail the uses of marketing research to obtain the information necessary to formulate satisfactory advertising campaigns. Admittedly the material on marketing research is basic and general—it presents nothing that will be new to anyone except those almost totally unfamiliar with the field—but it does serve to emphasize the rational and analytical side of advertising planning. It is noteworthy that the author's major emphasis on marketing research in a book on advertising is not an entirely new innovation. He is only another recent writer on advertising who has made this departure from earlier outlines, and thus he tends to the integration of the tools and ways of thinking of the market researcher in advertising. Since books and courses on marketing research that are not purely technique-oriented are bound to be concerned with research as applied to the component parts of marketing—e.g., *advertising* research, *sales* research, or *product introduction* research, etc., this trend toward the integration of advertising and marketing research may be a harbinger of a new approach to the treatment of marketing research with implications of major importance for the future.

After part 1, the outline and approach reverts disappointingly to the usual form. The material from chapter 4 on, covers all the aca-

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Books for Businessmen — cont.

demic and textbookish usuals including chapters on brand names and trademarks, trade characters, packaging, benefits which appeal to buyers, lay-out, copy, typography and production, newspapers, magazines, television and radio, etc. All this material is instructive. The subjects are covered comprehensively and accurately. However, the author departs from his preface statements, "the emphasis on this book is on principles" and gets down into the technicalities of typography, halftone engravings, and other fine points of colour reproduction. In other words, there is excellent coverage of a great deal of information at the nuts and bolts level of advertising techniques, but shallow coverage of information, concepts, and material, of use to managers.

This reviewer was also disappointed that the book did not follow through on its promising subtitle "Mass Communication in Marketing." Such a sub-title implies the presentation of a conceptual framework relating theories of consumer behaviour, the communication of buying incentives, and the relationship of advertising expenditures to other consumer-persuading tools in the total marketing mix. A new and worthwhile treatment of this aspect of advertising is conspicuous by its absence.

As a general introductory text on advertising, this book will be placed on my shelf next to its half-dozen or more generally adequate predecessors. Very few *Quarterly* readers would find it worthwhile buying.

Donald H. Thain
Associate Professor, U.W.O.

LEADERSHIP AND ORGANIZATION:
A Behavioral Science Approach

by Robert Tannenbaum, Irving R. Weschler, and Fred Massarik, McGraw-Hill Book Co., Toronto, 1960, 456 pp., $7.50.

Assembled between the covers of this book are 24 chapters, which,

organized under three divisions — Leadership and the Influence Process, Sensitivity Training, and Studies in Organization, offer in essence a report on the study, training, and research of the Human Relations Research Group at the University of California, Los Angeles. For a decade this group has steadily evolved a set of concepts, methodological tools, and experiences relating to leadership and interpersonal influence. Most of the chapters of the book have previously appeared as articles. Some have been rewritten, the majority not. While chapters therefore are not always similar in style or sophistication, they do provide a remarkable commentary on the development of the research group's thinking. The book then becomes a selection of the writings — some theoretical, some speculative, some interpretive, others simply descriptive or reportive—of an interdisciplinary group which has had a growing impact on the human relations field.

Leadership and Organization is a fascinating book — the reader can browse, or settle down to digest a particular facet with equal profit. This reviewer was struck particularly by the integrity of part two on sensitivity training. This is presented for the most part in terms of clinical notes and interpretations. Perhaps this most successful section offers comment on the book as a whole. There has not as yet been developed a theoretical explanation of the dynamics of the sensitivity group's process. One wonders if the *other-directedness* such training engenders, coupled with the author's seeming distaste for any form of *dominate* leadership, does not automatically restrict the elaboration of a theoretical model of the influence process, which is one of their major aims. Since the volume was designed as a stock-taking exercise, perhaps an overcritical review is in poor taste. In fact the stated invita-

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tion by the authors of critical appraisal may indicate the vigor of the U.C.L.A. group. Some of the best chapter, reflect the *sensitivity* of the authors. Those on empathy, the basic issues in human relations, the concept of the manager, and decision-making will become even more popular references with the present volume.

The book ends with three excellent commentaries by distinguished experts whose appraisal seems to coincide with those of this reviewer: much current and valuable knowledge, some weak spots, all interesting reading, with the promise implicit that some of the current controversial findings will provide the seed-bed of more rigorous analytical work in the next decade.

Craig Lundberg,
Assistant Professor, U.W.O.

MANUFACTURING PROCESSES IN CANADA

Edited by K. C. Livingston and T. C. Graham, University of Toronto Press, Toronto, 1960, 304 pp. $10.50.

This book describes, in relatively good detail, the manufacturing processes of aluminum, beef, brewing, brick, detergents, flat-drawn glass, asbestos-magnesia insulation, iron and steel, magazines, petroleum, pulp and paper, rubber, textiles—cotton, wool, and synthetics, tobacco, and wire and cable.

These descriptions have been written by men in Canadian organizations representative of the industry in which they are a part. The result has been a compilation of technically sound work flow explanation. However, this reviewer is disappointed that the editors have chosen to confine this book to these descriptions alone.

First, although written by Canadians, these descriptions would be practically identical for manufacturing processes in Europe, Latin America, or the United States. Sec-

ond, there still are many Canadian manufacturing processes not included. The manufacture of electrical goods, automobiles, cement, furniture, and plastics are only a few examples. Third, the typical Canadian aspect of these processes lies, in many cases, in the management of them. The marketing, financial, labour, and control problems involved would be of great interest to many. In this connection, the very limited supply of statistical information was also a disappointment. That this kind of information can be included successfully and meaningfully was shown by Stanley S. Miller in his text, *Manufacturing Policy.*[1]

This reviewer was disappointed that the ambitious title *Manufacturing Processes in Canada* was not as all inclusive as it sounded.

—Michiel R. Leenders,
Instructor, U.W.O.

[1]*Manufacturing Policy,* Richard D. Irwin, Inc. Homewood Illinois, 1957.

ON THE WRITING OF ADVERTISING

by Walter Weir, McGraw-Hill, 1960, 206 pp., $5.75.

This is an excellent book with a deceptive title. The title would lead the reader to believe that this is a technical book on the writing of copy. However, Mr. Weir considers that "good" copy can only be written by the practitioner of a profession, with its concomitant study and labour. The author considers the place of advertising in the "total" picture—not only of marketing, but in the general economy. His book is provocative, stimulating, and characterized by the wonderful command of the English language. *On The Writing of Advertising* has been written by a man who has an obvious love for his art. This is a readable, intelligent, and urbane book that can be recommended for a wide variety of readers.

Wm. A. Preshing,
Assistant Professor,
University of Alberta

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and fall, when Parliament is not sitting, he enjoys canoeing along the quiet river to reach his office before 9 a.m. Mr. Monteith also reaches his office about that time, just one hour later than The Chief.

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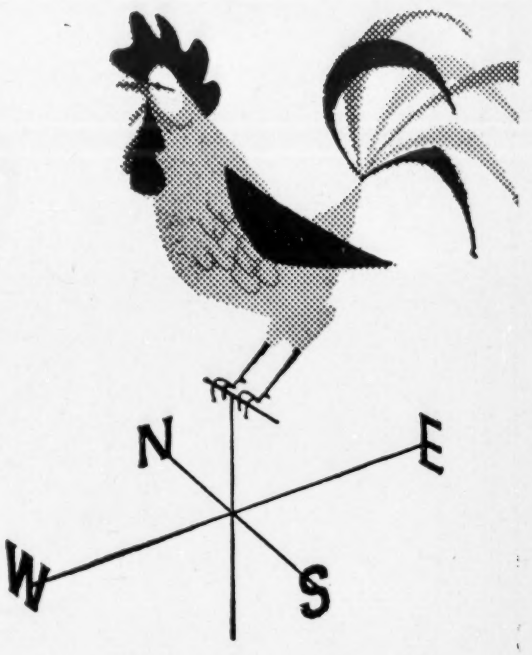
Authors continued

and others in 1955. In 1961 to 1962 Professor Holton will be in Italy on a research Fulbright award.

An Assistant Professor of Economics at Queen's University, **David C. Smith** received his B.A. from McMaster University in 1953. He received his M.A. from Oxford University and his Ph.D. in Economics from Harvard University. At the time of his collaboration with Professor Holton on "The Outlook for Canadian Growth in the Early 1960's," he was Assistant Professor at the School of Business Administration at the University of California, Berkeley.



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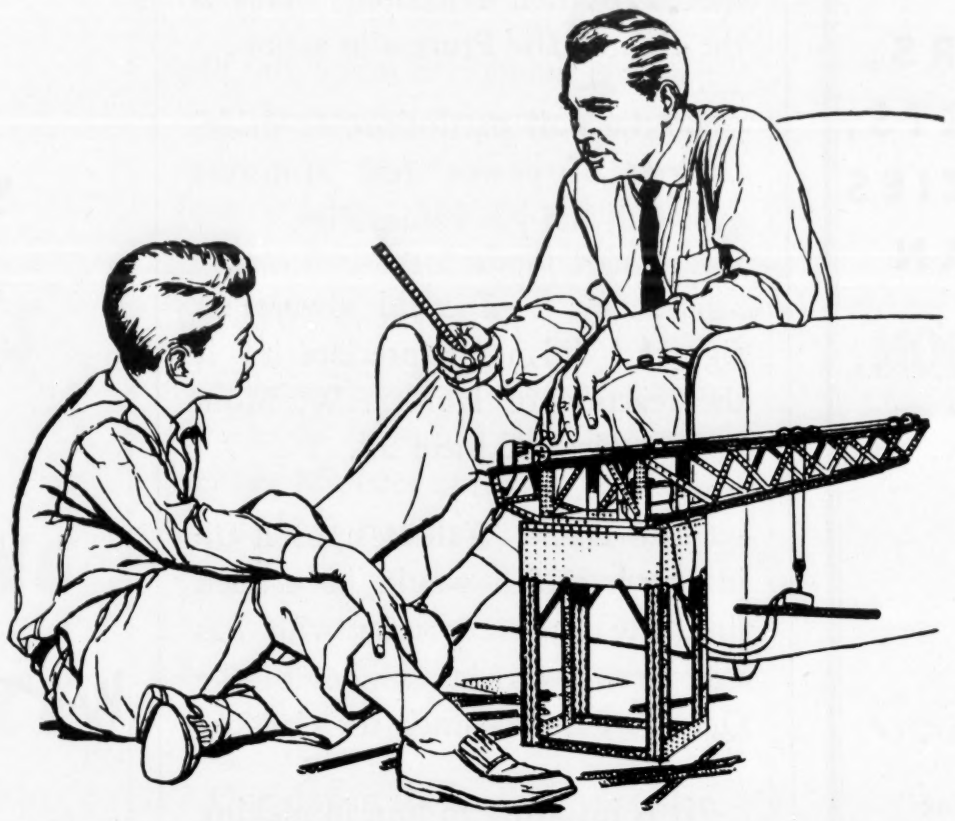

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